



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and
Electrical Characteristics of Customer Submitted Luminaire

CURTIS-STRAUS

Report No.: PHM-RPT-171026-D02
Date: October 26, 2017

LM-79 Distribution Testing: Total Luminous Flux, Luminous Intensity Distribution, Electrical Characteristics and Efficacy.

Report Prepared for:

Vantage Lighting
181 Narragansett Park Drive
East Providence, RI 02916
USA
Telephone: (860) 564-4512

Description : 6" Recessed Downlight
Model Tested: V6CRRU-3035K-M
WO/CS#: R3243

Report Issue Date: October 26, 2017
Date of Test(s): October 24-26, 2017
Total Number of Pages : 9 (including this page)

Report Reviewed by:

Mark Razvi
Photometric Lab Supervisor
Curtis-Straus



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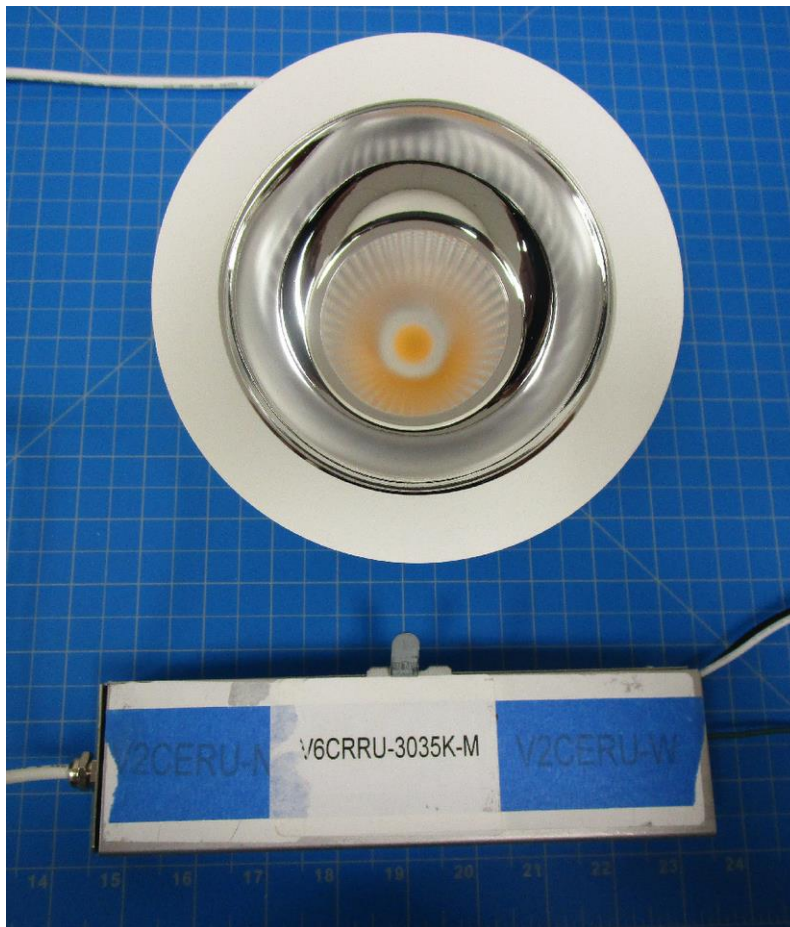
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DETAILED PRODUCT DESCRIPTION

Model #	V6CRRU-3035K-M
CS/WO#	R3243
Description	6" Recessed Downlight
Supply Voltage	120VAC

Pictures:





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Curtis-Straus Photometric Testing Information

Photometric Testing is performed in accordance with the procedures outlined in LM-79-2008 . The test sample is evaluated for photometric and electrical characteristics using the equipment listed below.

Curtis-Straus Environmental Testing Info

Curtis-Straus testing laboratory temperature during testing: 24.6 °C .

LIST OF EQUIPMENT USED:

Description	Model No.	Serial No.	Asset No	Cal. Date	Cal. Due
Yokogawa Power Meter	WT-310E	C2SK21021V	2356	12-19-16	12-19-17
Chroma AC Power Supply	61603	616030001283	2355	04-21-17	04-21-18
LabSphere Type-C GoniometerSystem	PM-150-140	022172153	AA-30058-195	10-17-17	11-17-17
Digital Thermometer	4627	160739886	2392	09-07-16	09-07-18

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LM-79-2008 Distribution Test Data

Model # V6CRRU-3035K-M
CS/WO# R3243
Description 6" Recessed Downlight
Supply Voltage 120VAC

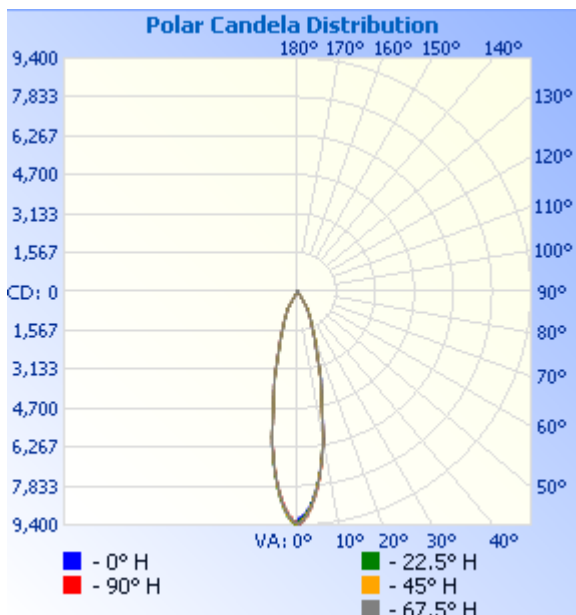
Result of Tests

Photometric and Electrical Test Data

Input Voltage: 120 VAC
 Base Orientation: Base Up

Lumens (lm)	Watts (W)	Volts (VAC)	Amps (A)	Efficacy	PF	Ithd (%)
2651.12	28.37	120.26	0.24	93.45	0.9815	0.22

Luminous Intensity Summary: Cd



Illumination Cone of Light
 Mounting Ht: 10 ft.

	Illuminance at a Distance	
	Center Beam fc	Beam Width
1.7ft	3,219 fc	0.8 ft 0.8 ft
3.3ft	854 fc	1.5 ft 1.5 ft
5.0ft	372 fc	2.3 ft 2.3 ft
6.7ft	207 fc	3.0 ft 3.0 ft
8.3ft	135 fc	3.8 ft 3.7 ft
10.0ft	93.0 fc	4.5 ft 4.5 ft

■ Vert. Spread: 25.6°
 ■ Horiz. Spread: 25.4°



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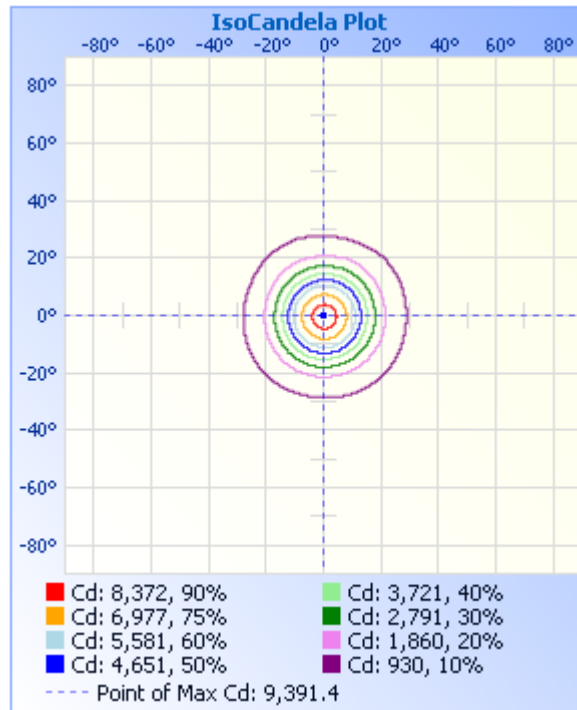
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IsoCandela Plot



Zonal Lumens Summary

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	2,304.5	86.9%
0-40	2,476.5	93.4%
0-60	2,528.5	95.4%
60-90	41.5	1.6%
70-100	41.0	1.5%
90-120	38.3	1.4%
0-90	2,570.0	96.9%
90-180	81.2	3.1%
0-180	2,651.2	100%

Lumens per Zone

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	707.9	26.7%	90-100	13.3	0.5%
10-20	1,005.6	37.9%	100-110	12.9	0.5%
20-30	590.9	22.3%	110-120	12.1	0.5%
30-40	172.1	6.5%	120-130	10.9	0.4%
40-50	32.6	1.2%	130-140	9.9	0.4%
50-60	19.4	0.7%	140-150	8.9	0.3%
60-70	13.7	0.5%	150-160	7.1	0.3%
70-80	13.8	0.5%	160-170	4.5	0.2%
80-90	14.0	0.5%	170-180	1.5	0.1%



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Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302	9302
0.1	9184	9283	9332	9372	9364	9291	9287	9331	9362	9351	9353	9319	9330	9236	9201	9199	9222
0.2	9162	9285	9305	9381	9375	9295	9299	9308	9337	9365	9333	9298	9302	9213	9204	9193	9199
0.3	9140	9260	9299	9391	9387	9309	9297	9280	9312	9379	9320	9277	9275	9199	9202	9184	9181
0.4	9122	9234	9301	9384	9383	9324	9296	9256	9308	9390	9327	9276	9250	9186	9200	9154	9167
0.5	9105	9211	9303	9362	9369	9319	9284	9253	9312	9387	9334	9282	9241	9179	9172	9125	9152
0.6	9096	9192	9307	9339	9356	9304	9255	9251	9315	9383	9337	9287	9232	9182	9143	9107	9159
0.7	9109	9173	9311	9312	9328	9289	9227	9252	9322	9369	9338	9291	9230	9184	9117	9106	9172
0.8	9122	9170	9311	9284	9297	9259	9210	9262	9329	9336	9339	9294	9240	9189	9106	9106	9186
0.9	9127	9183	9283	9255	9265	9228	9201	9272	9330	9303	9313	9291	9250	9194	9094	9111	9178
1	9120	9195	9254	9253	9260	9199	9191	9268	9304	9282	9280	9262	9241	9199	9090	9119	9169
1.1	9114	9188	9226	9252	9255	9197	9195	9247	9278	9270	9247	9234	9221	9180	9098	9127	9157
1.2	9090	9173	9198	9252	9252	9195	9200	9227	9251	9259	9225	9205	9201	9156	9106	9110	9122
1.3	9056	9158	9171	9251	9254	9194	9204	9199	9221	9259	9203	9177	9170	9132	9098	9085	9086
1.4	9022	9123	9160	9250	9257	9195	9178	9166	9192	9264	9187	9149	9136	9100	9081	9060	9059
1.5	9003	9087	9160	9238	9245	9196	9153	9134	9181	9267	9190	9138	9102	9069	9064	9026	9046
1.6	8986	9052	9160	9206	9214	9182	9125	9118	9181	9244	9194	9140	9096	9045	9029	8992	9032
1.7	8971	9038	9150	9175	9183	9150	9094	9105	9181	9221	9190	9143	9090	9045	8991	8963	9028
1.8	8974	9023	9136	9141	9150	9118	9062	9093	9172	9193	9176	9130	9085	9045	8952	8957	9030
1.9	8976	9014	9123	9105	9114	9085	9044	9096	9162	9153	9163	9113	9082	9039	8940	8951	9032
2	8973	9015	9082	9070	9079	9051	9041	9098	9151	9113	9129	9096	9080	9027	8928	8946	9013
2.1	8954	9017	9041	9059	9070	9017	9038	9089	9111	9084	9086	9053	9065	9015	8919	8943	8990
2.2	8936	8998	9003	9053	9066	9009	9031	9060	9071	9071	9042	9010	9029	8985	8918	8940	8967
2.3	8906	8961	8981	9048	9062	9004	9022	9030	9034	9058	9018	8972	8993	8947	8917	8918	8927
2.4	8864	8925	8958	9037	9047	8998	9013	8994	9007	9050	8997	8955	8956	8910	8902	8886	8887
2.5	8822	8889	8942	9026	9031	8984	8975	8953	8980	9045	8976	8938	8921	8880	8872	8854	8851
2.6	8799	8853	8936	9006	9009	8970	8934	8912	8962	9041	8971	8925	8885	8851	8841	8819	8834
2.7	8782	8817	8930	8965	8963	8948	8894	8892	8957	9010	8967	8918	8867	8826	8802	8782	8817
2.8	8765	8809	8913	8924	8917	8905	8861	8878	8952	8975	8956	8912	8852	8824	8759	8746	8805
2.9	8761	8802	8886	8884	8878	8863	8828	8865	8931	8939	8923	8887	8838	8821	8715	8735	8799
3	8757	8793	8859	8846	8848	8824	8804	8853	8903	8895	8890	8852	8825	8810	8700	8726	8793
3.1	8748	8775	8814	8808	8818	8788	8797	8842	8874	8851	8851	8816	8812	8777	8688	8714	8768
3.2	8707	8757	8766	8786	8803	8752	8789	8824	8828	8814	8804	8772	8791	8744	8676	8696	8734
3.3	8665	8727	8718	8774	8796	8733	8770	8780	8780	8796	8758	8726	8748	8704	8661	8679	8700
3.4	8624	8679	8692	8761	8789	8720	8739	8736	8734	8778	8728	8682	8704	8658	8647	8650	8656



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3.5	8584	8631	8666	8740	8756	8707	8709	8694	8711	8762	8707	8663	8661	8612	8624	8606	8611
3.6	8544	8591	8644	8718	8720	8685	8666	8653	8687	8747	8686	8645	8620	8584	8584	8561	8567
3.7	8518	8559	8630	8694	8683	8664	8618	8613	8666	8732	8669	8627	8578	8562	8544	8521	8549
3.8	8507	8527	8617	8645	8632	8637	8570	8587	8651	8699	8654	8613	8556	8539	8502	8484	8532
3.9	8497	8512	8592	8597	8580	8591	8544	8573	8635	8655	8638	8599	8542	8526	8458	8446	8515
4	8477	8500	8554	8550	8536	8546	8521	8559	8606	8611	8595	8572	8528	8512	8415	8429	8500
4.1	8453	8488	8516	8508	8511	8501	8499	8537	8566	8564	8552	8528	8503	8493	8391	8415	8484
4.2	8429	8450	8468	8465	8485	8459	8483	8514	8526	8516	8508	8484	8476	8450	8374	8401	8453
4.3	8380	8411	8416	8437	8463	8416	8467	8490	8476	8470	8456	8434	8447	8408	8356	8370	8407
4.4	8328	8370	8364	8422	8444	8391	8441	8437	8424	8449	8405	8382	8394	8363	8331	8340	8362
4.5	8280	8319	8332	8406	8425	8376	8393	8384	8372	8427	8368	8330	8341	8314	8304	8302	8317
4.6	8246	8268	8303	8381	8388	8360	8345	8334	8341	8404	8346	8307	8292	8266	8274	8250	8272
4.7	8212	8225	8275	8352	8344	8330	8295	8291	8311	8379	8323	8284	8254	8234	8225	8199	8227
4.8	8184	8198	8256	8324	8300	8298	8244	8248	8283	8354	8300	8262	8216	8211	8176	8154	8205
4.9	8168	8172	8236	8271	8249	8264	8192	8215	8264	8314	8275	8237	8187	8189	8129	8116	8185
5	8152	8148	8211	8218	8197	8208	8164	8192	8246	8263	8250	8212	8168	8163	8088	8077	8164
5.1	8121	8126	8166	8167	8148	8151	8145	8169	8215	8211	8200	8178	8149	8136	8047	8055	8131
5.2	8075	8104	8121	8124	8124	8100	8126	8140	8165	8160	8148	8125	8113	8109	8018	8039	8099
5.3	8030	8059	8070	8082	8101	8060	8094	8108	8114	8108	8096	8073	8072	8058	7999	8023	8058
5.4	7979	8011	8014	8046	8076	8020	8062	8075	8062	8057	8049	8021	8032	8007	7980	7988	8003
5.5	7926	7962	7957	8023	8047	7989	8027	8024	8009	8033	8001	7970	7976	7957	7949	7951	7948
5.6	7873	7908	7922	8000	8018	7964	7972	7972	7957	8009	7960	7920	7919	7909	7915	7912	7900
5.7	7847	7854	7892	7969	7973	7940	7918	7921	7925	7984	7933	7890	7867	7861	7881	7856	7860
5.8	7823	7808	7862	7934	7914	7906	7867	7873	7898	7951	7905	7866	7836	7822	7823	7800	7820
5.9	7797	7786	7836	7899	7856	7870	7823	7824	7871	7917	7875	7841	7804	7796	7764	7752	7794
6	7767	7763	7809	7845	7808	7834	7780	7784	7840	7874	7841	7805	7775	7769	7709	7715	7771
6.1	7736	7734	7779	7786	7764	7779	7747	7762	7808	7819	7808	7769	7748	7738	7669	7677	7749
6.2	7695	7698	7729	7729	7720	7723	7723	7740	7772	7764	7758	7727	7721	7706	7630	7648	7707
6.3	7640	7662	7678	7683	7694	7669	7699	7710	7712	7710	7702	7667	7680	7673	7597	7623	7663
6.4	7585	7613	7624	7637	7671	7622	7659	7648	7652	7659	7646	7607	7623	7617	7574	7598	7618
6.5	7536	7557	7567	7596	7644	7575	7613	7586	7596	7607	7592	7556	7565	7558	7551	7556	7564
6.6	7492	7502	7509	7566	7596	7536	7567	7528	7547	7573	7538	7514	7511	7500	7515	7511	7509
6.7	7448	7456	7467	7536	7549	7508	7507	7490	7498	7543	7490	7473	7459	7453	7468	7465	7459
6.8	7418	7413	7434	7501	7497	7481	7447	7452	7461	7514	7463	7440	7406	7406	7422	7407	7428
6.9	7392	7372	7400	7462	7434	7446	7391	7417	7435	7474	7435	7413	7377	7366	7367	7349	7397
7	7366	7345	7368	7423	7371	7406	7353	7386	7408	7433	7401	7385	7349	7341	7309	7296	7364
7.1	7315	7318	7336	7369	7325	7365	7315	7354	7370	7389	7354	7340	7319	7315	7251	7257	7321
7.2	7263	7287	7303	7309	7290	7309	7281	7311	7328	7330	7307	7292	7278	7282	7213	7219	7278
7.3	7210	7238	7247	7250	7255	7249	7251	7260	7286	7270	7250	7243	7237	7239	7175	7185	7230
7.4	7154	7188	7191	7196	7220	7189	7221	7209	7222	7214	7186	7183	7188	7196	7139	7155	7168



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7.5	7097	7134	7135	7143	7185	7139	7176	7151	7158	7159	7123	7122	7126	7139	7110	7126	7106
7.6	7050	7074	7080	7093	7150	7090	7122	7091	7098	7105	7076	7066	7063	7076	7081	7082	7054
7.7	7016	7014	7025	7062	7089	7044	7068	7031	7052	7067	7033	7022	7009	7014	7042	7030	7013
7.8	6983	6970	6979	7030	7026	7012	7008	6989	7005	7036	6990	6978	6958	6970	6986	6978	6972
7.9	6948	6933	6945	6995	6965	6981	6947	6947	6964	7005	6959	6941	6907	6928	6930	6920	6940
8	6912	6897	6912	6956	6912	6944	6886	6907	6929	6959	6927	6909	6875	6887	6875	6860	6911
8.1	6876	6860	6872	6917	6858	6899	6851	6872	6894	6911	6889	6878	6844	6854	6819	6800	6882
8.2	6822	6823	6829	6866	6811	6854	6815	6836	6849	6861	6837	6831	6812	6822	6763	6765	6832
8.3	6765	6784	6785	6804	6779	6798	6779	6792	6798	6800	6784	6776	6764	6782	6722	6730	6780
8.4	6708	6728	6727	6742	6747	6736	6739	6739	6747	6739	6729	6721	6716	6725	6683	6695	6726
8.5	6653	6671	6666	6685	6706	6675	6698	6686	6686	6681	6670	6661	6664	6667	6644	6659	6666
8.6	6598	6613	6607	6630	6657	6623	6648	6625	6623	6631	6612	6601	6604	6609	6606	6623	6606
8.7	6548	6554	6554	6576	6608	6573	6584	6561	6562	6582	6562	6543	6543	6550	6568	6576	6553
8.8	6518	6494	6501	6541	6547	6523	6520	6497	6519	6540	6518	6500	6490	6491	6524	6519	6512
8.9	6487	6446	6453	6507	6482	6489	6462	6454	6476	6506	6473	6458	6445	6448	6467	6461	6471
9	6448	6409	6420	6470	6417	6455	6408	6412	6435	6472	6435	6418	6400	6410	6409	6407	6433
9.1	6402	6372	6387	6422	6373	6417	6353	6371	6399	6423	6397	6383	6363	6371	6351	6353	6398
9.2	6355	6334	6346	6375	6329	6368	6318	6331	6363	6369	6358	6348	6330	6331	6293	6300	6362
9.3	6299	6296	6297	6321	6286	6319	6285	6292	6315	6315	6298	6303	6296	6291	6235	6262	6313
9.4	6238	6258	6248	6260	6251	6262	6251	6247	6252	6253	6239	6248	6245	6247	6193	6225	6260
9.5	6178	6197	6188	6199	6215	6198	6200	6188	6190	6192	6180	6194	6191	6188	6157	6188	6206
9.6	6132	6135	6124	6143	6172	6133	6148	6129	6129	6133	6122	6134	6136	6129	6120	6147	6150
9.7	6090	6074	6061	6089	6117	6080	6093	6068	6070	6086	6064	6071	6077	6072	6081	6106	6093
9.8	6048	6022	6011	6035	6061	6032	6031	6006	6011	6039	6016	6009	6017	6018	6042	6059	6040
9.9	6015	5971	5965	5994	6001	5984	5968	5945	5972	5996	5976	5966	5964	5964	6001	6000	6001
10	5982	5925	5920	5954	5939	5947	5915	5899	5935	5960	5936	5925	5924	5920	5939	5940	5963
15	3624	3581	3537	3552	3551	3563	3621	3623	3595	3576	3569	3594	3589	3633	3658	3653	3609
20	1988	2063	2037	1979	2008	1981	2022	2016	2011	1982	1999	2016	2047	2023	2106	2115	1984
25	1239	1245	1223	1209	1217	1230	1231	1217	1222	1226	1244	1261	1248	1252	1245	1251	1239
30	734	815	795	745	779	809	804	783	789	797	797	789	794	818	810	730	730
35	117	178	166	160	166	174	165	151	171	175	165	161	158	167	161	120	117
40	54	58	59	58	58	59	59	59	58	57	58	58	60	59	60	56	54
45	38	39	41	39	38	39	41	40	39	39	40	41	40	41	40	41	38
50	30	32	34	32	32	32	32	33	32	32	32	33	33	33	33	33	30
55	19	19	20	19	19	19	19	20	18	19	20	20	22	20	20	20	19
60	15	16	15	15	16	16	16	16	16	16	16	16	16	16	16	16	15
65	14	13	13	14	13	13	12	13	13	13	12	13	13	13	14	14	13
70	13	13	13	13	13	14	13	13	13	13	13	14	13	13	13	14	13
75	14	13	12	13	14	13	13	12	12	12	13	13	13	13	14	14	14
80	12	13	14	12	13	13	13	13	12	12	13	13	14	14	13	13	14



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and Electrical Characteristics of Customer Submitted Luminaire

Report No.: PHM-RPT-171026-D02

Date: October 26, 2017

CURTIS-STRAUS

85	13	13	13	14	13	12	13	12	12	13	12	13	13	13	13	13
90	12	12	12	12	13	12	13	13	13	12	12	12	12	13	12	12
95	13	12	12	12	12	12	12	12	11	12	12	12	13	12	14	12
100	12	13	12	12	12	13	12	12	12	11	11	12	12	11	12	11
105	13	12	12	11	12	11	12	12	13	12	12	13	12	13	13	12
110	13	12	13	12	12	12	12	12	13	12	12	12	12	14	13	12
115	12	14	13	12	12	12	12	11	12	13	13	12	12	12	12	13
120	13	13	12	11	12	12	12	12	13	12	12	12	12	12	13	12
125	13	12	12	12	11	13	11	12	12	12	12	12	12	12	13	12
130	13	12	13	13	12	13	11	11	11	12	12	12	11	13	13	11
135	12	12	13	14	12	13	12	13	13	12	13	13	13	13	13	12
140	12	13	13	14	13	14	14	13	13	13	14	14	14	14	13	14
145	13	14	15	14	14	15	14	14	14	15	15	14	14	15	14	14
150	15	16	15	15	15	15	15	15	15	15	14	15	15	15	14	15
155	15	16	16	16	15	16	15	15	15	15	16	15	15	16	15	16
160	15	16	16	15	16	16	16	16	17	16	15	16	16	16	16	16
165	16	16	16	16	16	16	16	16	16	16	17	16	16	15	16	16
170	16	16	17	16	16	16	16	16	16	16	16	16	16	17	16	16
175	16	16	16	17	16	17	16	16	16	16	16	16	16	16	16	17
180	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16