

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P147353

Luminaire Tested: **TLM-F04-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147353
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F04-LED-E1-5MQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

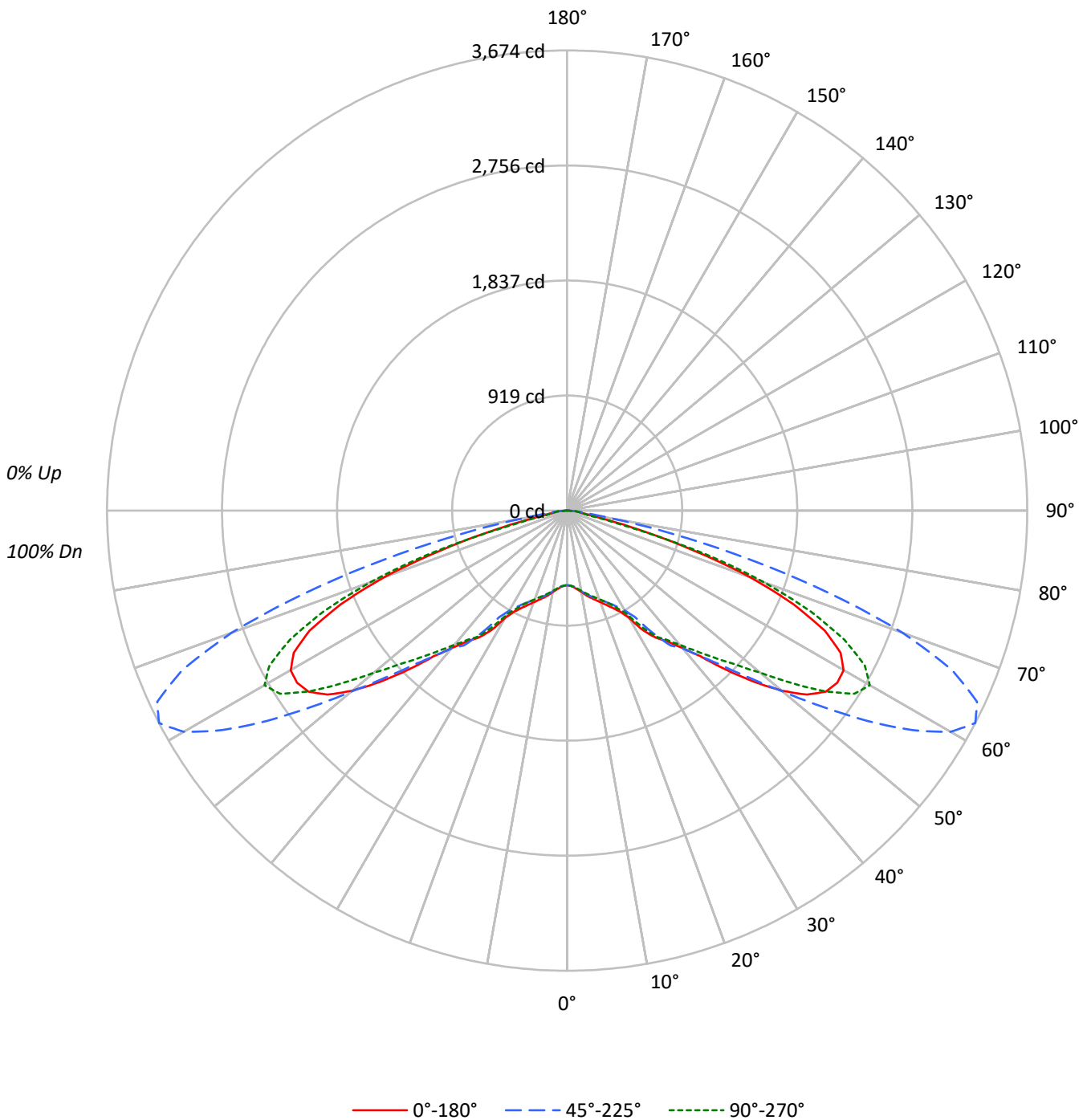
Lumens per Lamp: N/A
Luminaire Lumens: 8984.5 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P147353
CATALOG NUMBER: TLM-F04-LED-E1-5MQ-8030

Luminous Intensity Polar Plot





TEST NUMBER: P147353

CATALOG NUMBER: TLM-F04-LED-E1-5MQ-8030

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	94	90	103	97	93	88	93	89	85	89	86	83	85	83	80	78
2	93	82	73	66	90	80	72	65	76	70	64	73	67	62	70	65	61	58
3	82	68	58	50	79	67	57	49	63	55	48	60	53	47	57	51	46	44
4	73	57	46	38	70	56	46	38	53	44	37	51	43	36	48	41	36	33
5	65	49	38	30	63	48	37	30	46	36	29	43	35	29	41	34	28	26
6	59	43	32	24	57	42	31	24	40	30	23	38	29	23	36	29	23	20
7	54	37	27	20	52	37	27	19	35	26	19	33	25	19	32	24	19	16
8	49	33	23	16	47	33	23	16	31	22	16	30	22	16	28	21	16	13
9	46	30	20	14	44	29	20	14	28	20	14	27	19	14	26	19	13	11
10	42	27	18	12	41	27	18	12	25	17	12	24	17	12	23	17	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9581	9581	9581
5°	9904	9850	9828
10°	10775	10662	10609
15°	11960	11736	11619
20°	13294	12976	12865
25°	15174	14557	14672
30°	18328	17095	17681
35°	24331	23439	24031
40°	30003	30091	29321
45°	40873	39710	37718
50°	55898	56188	50362
55°	70606	82028	70514
60°	81893	113545	89636
65°	86239	137270	92877
70°	73155	133815	78632
75°	37107	93934	32234
80°	11778	32613	11861
85°	12756	16958	13014



TEST NUMBER: P147353

CATALOG NUMBER: TLM-F04-LED-E1-5MQ-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	0.7
10°-20°	202.0	2.2
20°-30°	390.6	4.3
30°-40°	756.3	8.4
40°-50°	1365.7	15.2
50°-60°	2374.7	26.4
60°-70°	2695.9	30.0
70°-80°	1045.2	11.6
80°-90°	94.3	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	652.4	7.3
0°-40°	1408.8	15.7
0°-60°	5149.1	57.3
0°-90°	8984.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8984.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	614	613	611	610	609	60
15°	719	714	706	700	699	205
25°	856	839	821	822	828	403
35°	1241	1217	1195	1216	1225	775
45°	1799	1758	1748	1680	1660	1409
55°	2521	2642	2929	2606	2518	2219
65°	2269	2604	3611	2803	2443	2163
75°	598	836	1513	792	519	724
85°	69	99	92	99	71	68
90°	0	0	0	0	0	



TEST NUMBER: P147353

CATALOG NUMBER: TLM-F04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	596.4	596.4	596.4	596.4	596.4	596.4	596.4	596.4	596.4	596.4	596.4
2.5°	600.2	602.0	601.5	600.6	600.6	600.6	600.2	598.8	598.2	599.2	600.1
5°	614.1	614.1	614.1	614.1	613.2	613.1	612.2	611.3	611.8	610.8	610.4
7.5°	635.4	634.0	634.0	633.6	633.6	632.6	631.2	629.4	629.8	629.3	628.9
10°	660.5	661.0	659.6	661.0	658.6	658.2	656.4	655.4	655.0	653.6	653.6
12.5°	690.7	689.3	689.3	688.4	687.4	686.5	683.8	683.2	681.4	680.4	679.0
15°	719.1	718.6	716.7	714.8	714.4	713.4	710.2	708.4	707.9	705.6	703.7
17.5°	747.3	746.4	744.2	743.2	741.3	740.0	737.2	734.3	733.0	732.0	729.7
20°	777.6	776.6	774.3	772.4	770.2	768.3	764.1	761.8	760.4	759.0	757.1
22.5°	815.2	813.4	809.6	806.4	801.2	799.4	793.8	790.6	788.2	786.4	785.4
25°	856.0	856.6	851.4	847.2	841.2	836.0	829.1	825.4	823.1	821.2	820.8
27.5°	907.2	907.6	903.0	896.9	887.6	882.0	872.8	868.2	866.8	864.9	864.4
30°	988.0	983.8	975.9	966.2	957.8	945.7	932.2	927.6	923.0	921.5	921.6
32.5°	1136.6	1134.3	1127.8	1103.6	1092.5	1067.4	1043.8	1030.2	1014.9	1007.4	1002.8
35°	1240.6	1239.8	1234.6	1226.2	1219.3	1214.2	1200.2	1197.9	1195.2	1195.1	1198.8
37.5°	1317.3	1311.7	1310.8	1312.2	1310.3	1311.2	1322.4	1337.7	1350.8	1357.2	1356.3
40°	1430.6	1422.8	1427.4	1424.1	1420.0	1419.0	1422.8	1428.8	1434.8	1434.8	1433.4
42.5°	1578.8	1582.5	1584.4	1571.0	1562.1	1559.8	1568.6	1566.8	1572.8	1570.4	1564.4
45°	1799.0	1796.6	1793.4	1777.2	1763.2	1752.1	1754.4	1751.2	1751.6	1747.8	1743.2
47.5°	2021.0	2028.9	2015.4	2007.6	1991.8	1983.8	1990.4	1984.8	1995.4	1975.9	1966.6
50°	2236.5	2242.1	2237.4	2226.3	2226.3	2237.4	2245.4	2255.6	2270.4	2248.1	2214.7
52.5°	2413.0	2417.6	2424.6	2434.0	2456.7	2480.4	2513.8	2549.6	2577.9	2573.8	2535.6
55°	2520.8	2526.4	2538.0	2570.0	2610.9	2673.2	2748.9	2832.0	2897.0	2928.6	2900.8
57.5°	2557.0	2561.2	2592.8	2631.4	2695.0	2787.4	2914.2	3057.8	3182.7	3262.1	3249.6
60°	2548.7	2548.6	2580.7	2633.6	2722.8	2845.5	3024.8	3223.6	3415.0	3533.8	3516.2
62.5°	2460.9	2465.5	2511.5	2575.1	2682.9	2829.7	3043.4	3297.4	3526.4	3674.1	3659.8
65°	2268.6	2271.8	2321.5	2397.2	2517.6	2691.2	2924.9	3206.4	3468.8	3611.0	3584.0
67.5°	1957.8	1961.0	2001.5	2087.0	2214.2	2395.9	2648.0	2957.9	3214.8	3327.2	3246.3
70°	1557.4	1566.8	1592.8	1683.3	1780.0	1957.8	2190.1	2499.9	2742.4	2848.8	2759.5
72.5°	1061.4	1085.0	1116.6	1197.0	1289.4	1437.1	1622.0	1883.0	2077.6	2200.8	2121.4
75°	597.8	631.2	641.0	701.8	778.0	894.6	1029.8	1217.0	1413.4	1513.3	1417.6
77.5°	258.2	285.7	297.8	326.0	385.5	434.2	516.5	642.9	794.8	864.9	750.2
80°	127.3	133.8	138.8	147.7	164.4	180.2	219.2	274.5	336.8	352.5	280.6
82.5°	98.5	103.1	112.0	118.9	123.1	127.3	131.0	138.4	144.4	147.7	139.4
85°	69.2	75.2	85.0	92.9	97.6	100.8	104.0	106.4	100.8	92.0	96.6
87.5°	18.2	23.7	33.0	35.8	40.4	42.8	41.8	43.2	39.0	28.4	31.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P147353

CATALOG NUMBER: TLM-F04-LED-E1-5MQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	596.4	596.4	596.4	596.4	596.4	596.4	596.4	596.4
2.5°	599.6	599.2	599.7	599.7	599.6	599.2	599.2	599.2
5°	610.3	610.3	610.8	609.9	609.8	610.3	609.8	609.4
7.5°	628.4	628.0	628.0	627.6	628.0	627.6	627.5	627.1
10°	652.6	651.7	652.2	650.8	650.8	650.3	650.3	650.3
12.5°	678.6	677.2	677.7	676.2	674.0	674.4	674.9	674.4
15°	703.7	702.3	700.9	700.0	698.6	699.1	699.0	698.6
17.5°	729.2	726.4	726.0	724.6	724.2	724.1	724.2	724.6
20°	755.7	753.8	753.4	752.0	751.6	753.0	753.4	752.5
22.5°	784.0	783.1	784.1	783.2	784.6	785.4	785.9	785.0
25°	819.8	818.9	820.2	823.6	825.4	826.4	828.6	827.7
27.5°	865.8	864.9	868.1	872.8	875.6	880.2	882.5	883.5
30°	925.3	929.4	931.4	940.6	942.4	949.8	949.9	953.1
32.5°	1011.6	1019.6	1033.5	1047.9	1067.8	1082.2	1082.3	1089.7
35°	1201.2	1204.4	1215.1	1217.4	1221.6	1226.2	1221.6	1225.3
37.5°	1346.6	1332.2	1321.9	1307.6	1298.7	1298.7	1299.6	1298.7
40°	1420.8	1415.3	1410.6	1398.6	1396.7	1396.2	1396.2	1398.1
42.5°	1553.8	1540.2	1532.8	1522.6	1519.4	1518.4	1518.0	1518.9
45°	1726.5	1704.7	1684.7	1674.4	1665.6	1657.3	1660.1	1660.1
47.5°	1927.6	1893.7	1861.2	1843.6	1828.2	1821.3	1816.6	1815.2
50°	2172.4	2125.0	2083.2	2050.2	2028.0	2027.5	2029.8	2015.0
52.5°	2472.5	2397.7	2345.7	2301.0	2280.2	2277.9	2270.4	2262.1
55°	2805.1	2716.4	2630.4	2582.6	2555.1	2540.3	2531.5	2517.5
57.5°	3147.9	3028.5	2905.0	2828.2	2780.0	2746.6	2728.9	2721.0
60°	3412.2	3249.1	3086.0	2963.0	2882.6	2833.0	2802.2	2789.7
62.5°	3516.2	3295.0	3086.0	2924.4	2808.3	2739.6	2698.2	2680.1
65°	3392.2	3130.2	2892.4	2714.0	2584.4	2507.8	2462.7	2443.2
67.5°	3045.6	2814.4	2555.6	2378.2	2244.9	2169.2	2120.4	2106.0
70°	2553.3	2316.9	2069.8	1911.4	1792.4	1730.7	1680.0	1674.0
72.5°	1918.8	1714.9	1503.1	1372.1	1276.4	1174.2	1148.2	1161.2
75°	1230.0	1039.0	850.5	732.5	645.2	547.6	510.0	519.3
77.5°	582.5	451.0	325.6	251.8	211.4	180.7	172.8	168.1
80°	216.0	175.1	154.7	146.8	141.2	136.1	132.4	128.2
82.5°	139.8	136.6	132.4	131.0	126.8	120.3	108.2	103.1
85°	104.5	104.5	98.9	99.4	96.1	87.8	76.6	70.6
87.5°	30.6	27.4	25.1	23.2	22.8	20.5	14.9	13.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)