

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: P147333

Luminaire Tested: **TLM-F02-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147333  
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-F02-LED-E1-5MQ-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

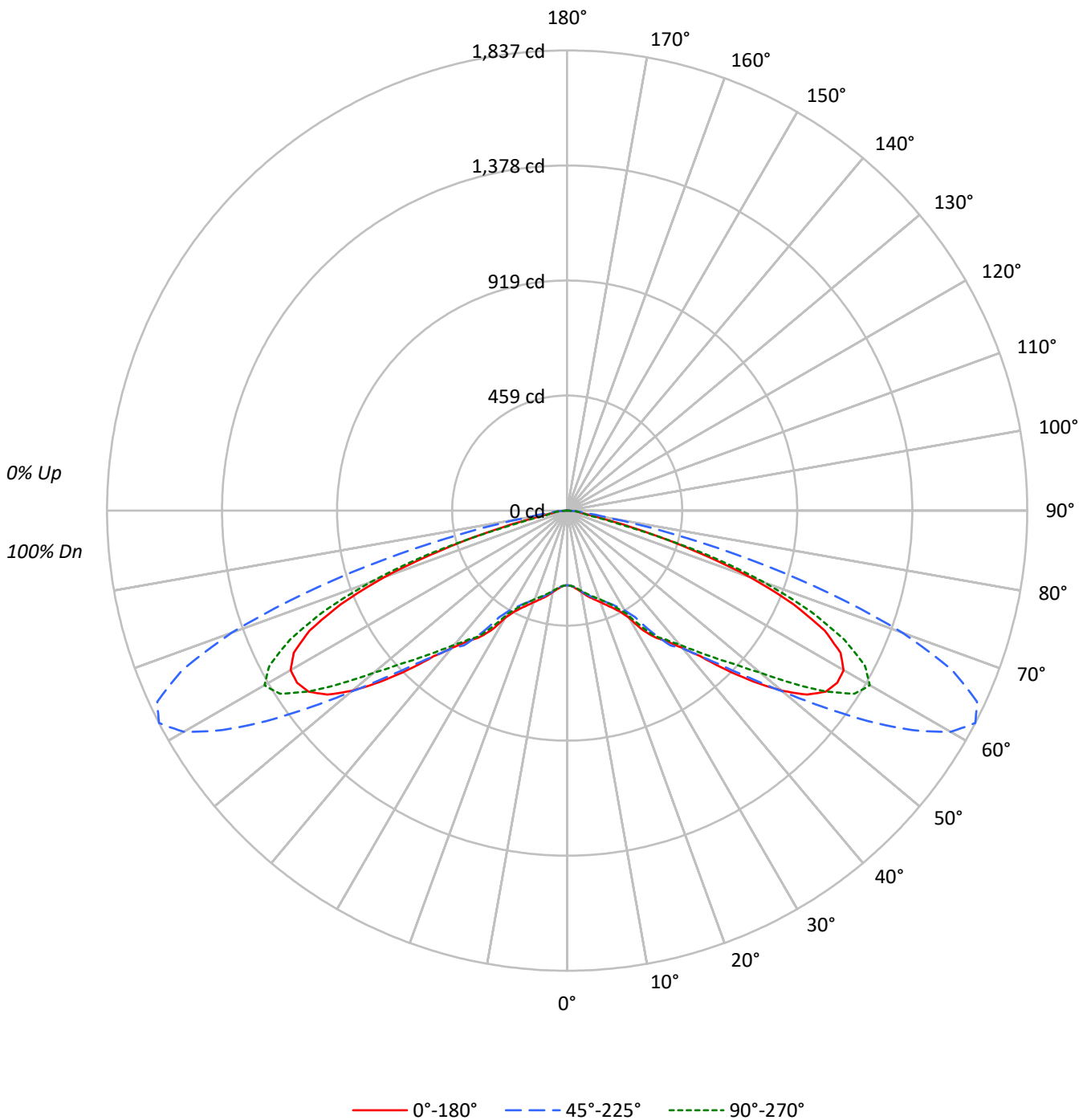
Lumens per Lamp: N/A  
Luminaire Lumens: 4492.2 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 55  
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: P147333  
CATALOG NUMBER: TLM-F02-LED-E1-5MQ-8030

### Luminous Intensity Polar Plot





TEST NUMBER: P147333

CATALOG NUMBER: TLM-F02-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°	9727	9727	9727
5°	10052	10000	9977
10°	10937	10824	10768
15°	12140	11914	11795
20°	13496	13173	13058
25°	15404	14777	14896
30°	18606	17356	17951
35°	24700	23796	24397
40°	30457	30547	29767
45°	41493	40316	38287
50°	56742	57042	51125
55°	71676	83271	71585
60°	83137	115265	90997
65°	87546	139350	94284
70°	74263	135843	79823
75°	37669	95351	32729
80°	11947	33097	12040
85°	12949	17215	13211



TEST NUMBER: P147333

CATALOG NUMBER: TLM-F02-LED-E1-5MQ-8030

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.9	0.7
10°-20°	101.0	2.2
20°-30°	195.3	4.3
30°-40°	378.2	8.4
40°-50°	682.8	15.2
50°-60°	1187.3	26.4
60°-70°	1347.9	30.0
70°-80°	522.6	11.6
80°-90°	47.1	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°	326.2	7.3
0°-40°	704.4	15.7
0°-60°	2574.6	57.3
0°-90°	4492.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4492.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	307	307	305	305	305	30
15°	360	357	353	350	349	103
25°	428	419	411	411	414	202
35°	620	608	598	608	613	388
45°	900	879	874	840	830	705
55°	1260	1321	1464	1303	1259	1110
65°	1134	1302	1806	1402	1222	1081
75°	299	418	757	396	260	362
85°	35	50	46	50	35	34
90°	0	0	0	0	0	



TEST NUMBER: P147333

CATALOG NUMBER: TLM-F02-LED-E1-5MQ-8030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	298.2	298.2	298.2	298.2	298.2	298.2	298.2	298.2	298.2	298.2	298.2
2.5°	300.0	301.0	300.8	300.3	300.3	300.3	300.0	299.4	299.2	299.6	300.1
5°	307.0	307.0	307.0	307.0	306.6	306.6	306.1	305.6	305.8	305.4	305.2
7.5°	317.8	317.0	317.0	316.8	316.8	316.4	315.6	314.7	314.9	314.7	314.5
10°	330.2	330.5	329.8	330.5	329.3	329.1	328.2	327.7	327.4	326.8	326.8
12.5°	345.4	344.6	344.6	344.2	343.7	343.2	341.8	341.6	340.7	340.2	339.6
15°	359.5	359.3	358.3	357.4	357.2	356.8	355.1	354.2	354.0	352.8	351.8
17.5°	373.7	373.2	372.0	371.6	370.7	370.0	368.6	367.2	366.5	366.0	364.9
20°	388.8	388.3	387.2	386.2	385.0	384.2	382.0	380.9	380.2	379.5	378.6
22.5°	407.6	406.6	404.8	403.2	400.6	399.7	396.9	395.3	394.1	393.2	392.7
25°	428.0	428.2	425.7	423.6	420.6	418.0	414.6	412.7	411.6	410.6	410.4
27.5°	453.6	453.8	451.5	448.4	443.8	441.0	436.4	434.0	433.4	432.4	432.2
30°	494.0	491.9	488.0	483.1	478.8	472.8	466.2	463.8	461.4	460.8	460.8
32.5°	568.3	567.2	563.9	551.8	546.2	533.7	521.8	515.1	507.4	503.8	501.4
35°	620.3	619.8	617.3	613.2	609.6	607.1	600.1	599.0	597.6	597.6	599.4
37.5°	658.6	655.9	655.4	656.0	655.2	655.6	661.2	668.9	675.4	678.6	678.2
40°	715.3	711.4	713.7	712.1	710.0	709.5	711.3	714.4	717.4	717.4	716.7
42.5°	789.4	791.2	792.2	785.4	781.1	779.9	784.2	783.4	786.4	785.2	782.2
45°	899.5	898.4	896.7	888.6	881.6	876.0	877.2	875.6	875.8	874.0	871.6
47.5°	1010.5	1014.4	1007.7	1003.8	995.9	991.9	995.2	992.4	997.7	988.0	983.4
50°	1118.2	1121.0	1118.7	1113.2	1113.2	1118.8	1122.6	1127.8	1135.2	1124.1	1107.4
52.5°	1206.5	1208.8	1212.3	1217.0	1228.4	1240.2	1256.9	1274.8	1289.0	1286.8	1267.8
55°	1260.4	1263.2	1269.0	1285.0	1305.4	1336.6	1374.4	1416.0	1448.5	1464.3	1450.4
57.5°	1278.6	1280.6	1296.4	1315.7	1347.5	1393.7	1457.1	1528.8	1591.4	1631.0	1624.8
60°	1274.4	1274.4	1290.4	1316.8	1361.4	1422.7	1512.4	1611.8	1707.4	1766.9	1758.1
62.5°	1230.4	1232.8	1255.8	1287.6	1341.4	1414.8	1521.6	1648.8	1763.2	1837.0	1829.8
65°	1134.3	1135.9	1160.8	1198.6	1258.8	1345.6	1462.4	1603.2	1734.4	1805.5	1792.0
67.5°	979.0	980.6	1000.7	1043.4	1107.1	1198.0	1324.0	1479.0	1607.4	1663.6	1623.2
70°	778.7	783.4	796.4	841.6	890.0	978.9	1095.0	1249.9	1371.2	1424.4	1379.8
72.5°	530.7	542.5	558.3	598.5	644.7	718.6	811.0	941.5	1038.8	1100.4	1060.6
75°	298.9	315.6	320.5	350.9	389.0	447.3	514.9	608.4	706.8	756.6	708.8
77.5°	129.1	142.8	148.9	163.0	192.8	217.2	258.2	321.4	397.4	432.4	375.1
80°	63.6	66.9	69.4	73.8	82.2	90.1	109.6	137.3	168.4	176.2	140.2
82.5°	49.2	51.6	56.0	59.4	61.6	63.6	65.5	69.2	72.2	73.8	69.6
85°	34.6	37.6	42.5	46.4	48.8	50.4	52.0	53.2	50.4	46.0	48.3
87.5°	9.0	11.8	16.5	17.9	20.2	21.4	20.9	21.6	19.5	14.2	15.8
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: P147333

CATALOG NUMBER: TLM-F02-LED-E1-5MQ-8030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	298.2	298.2	298.2	298.2	298.2	298.2	298.2	298.2
2.5°	299.8	299.6	299.8	299.8	299.8	299.6	299.6	299.6
5°	305.2	305.2	305.4	304.9	305.0	305.2	305.0	304.7
7.5°	314.2	314.0	314.0	313.8	314.0	313.8	313.8	313.5
10°	326.3	325.8	326.1	325.4	325.4	325.2	325.2	325.1
12.5°	339.3	338.6	338.8	338.2	337.0	337.2	337.4	337.2
15°	351.8	351.2	350.5	350.0	349.3	349.5	349.5	349.3
17.5°	364.6	363.2	363.0	362.3	362.0	362.0	362.0	362.3
20°	377.8	376.9	376.7	376.0	375.8	376.5	376.7	376.2
22.5°	392.0	391.5	392.0	391.5	392.2	392.8	393.0	392.5
25°	410.0	409.5	410.2	411.8	412.7	413.2	414.4	413.9
27.5°	432.9	432.4	434.1	436.4	437.8	440.1	441.3	441.7
30°	462.6	464.7	465.6	470.3	471.2	475.0	475.0	476.6
32.5°	505.8	509.8	516.8	524.0	534.0	541.1	541.2	544.8
35°	600.6	602.2	607.6	608.7	610.8	613.2	610.8	612.7
37.5°	673.3	666.1	661.0	653.8	649.4	649.4	649.8	649.4
40°	710.4	707.7	705.3	699.3	698.3	698.2	698.2	699.1
42.5°	776.8	770.1	766.4	761.3	759.7	759.2	759.0	759.4
45°	863.2	852.4	842.4	837.2	832.8	828.6	830.0	830.0
47.5°	963.8	946.8	930.6	921.8	914.1	910.6	908.3	907.6
50°	1086.2	1062.5	1041.6	1025.2	1014.0	1013.8	1015.0	1007.5
52.5°	1236.2	1198.8	1172.8	1150.6	1140.0	1138.9	1135.2	1131.0
55°	1402.5	1358.2	1315.2	1291.3	1277.6	1270.2	1265.7	1258.8
57.5°	1574.0	1514.2	1452.4	1414.2	1390.0	1373.2	1364.4	1360.5
60°	1706.0	1624.6	1543.0	1481.5	1441.3	1416.4	1401.1	1394.9
62.5°	1758.1	1647.6	1543.0	1462.2	1404.1	1369.8	1349.1	1340.1
65°	1696.1	1565.1	1446.2	1357.0	1292.2	1253.9	1231.4	1221.6
67.5°	1522.8	1407.2	1277.8	1189.1	1122.4	1084.6	1060.2	1053.0
70°	1276.6	1158.4	1034.9	955.7	896.2	865.4	840.0	837.0
72.5°	959.4	857.4	751.6	686.1	638.2	587.2	574.2	580.6
75°	615.0	519.5	425.2	366.2	322.6	273.8	255.0	259.7
77.5°	291.2	225.5	162.8	125.9	105.6	90.4	86.4	84.1
80°	108.0	87.6	77.4	73.4	70.6	68.0	66.2	64.1
82.5°	69.9	68.3	66.2	65.5	63.4	60.2	54.1	51.6
85°	52.2	52.2	49.4	49.7	48.1	43.9	38.3	35.3
87.5°	15.3	13.7	12.6	11.6	11.4	10.2	7.4	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)