

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: P148376

Luminaire Tested: **TLM-F02-LED-E1-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148376
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33676)
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-E1-5XQ-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

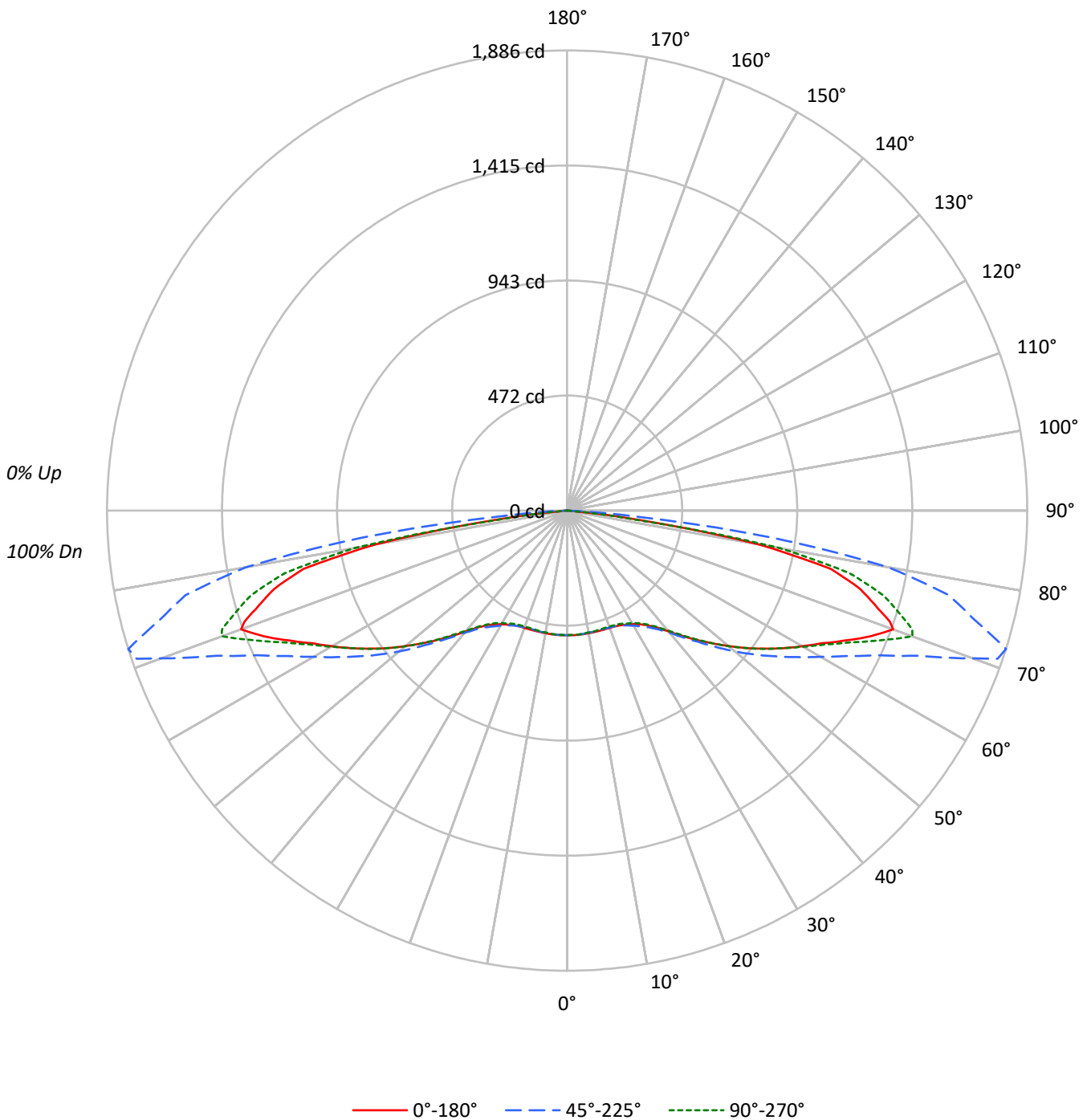
Lumens per Lamp: N/A
Luminaire Lumens: 5388.1 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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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	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73	70
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52	49
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38	36
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30	27
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24	21
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19	17
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16	14
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14	12
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12	10
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16651	16651	16651
5°	16745	16715	16705
10°	16898	16832	16806
15°	17239	17134	17087
20°	17758	17685	17564
25°	18650	18700	18423
30°	20248	20508	20056
35°	22824	23262	22681
40°	27519	27839	27289
45°	34514	35122	34384
50°	43772	45563	43874
55°	56117	59171	56231
60°	72503	78205	72777
65°	97217	108223	98637
70°	135604	168964	143682
75°	156890	217647	169102
80°	149295	250709	165637
85°	12126	101646	7934



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	0.9
10°-20°	143.9	2.7
20°-30°	241.0	4.5
30°-40°	367.4	6.8
40°-50°	586.7	10.9
50°-60°	902.0	16.7
60°-70°	1313.4	24.4
70°-80°	1479.5	27.5
80°-90°	305.4	5.7
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°	433.6	8.0
0°-40°	801.0	14.9
0°-60°	2289.7	42.5
0°-90°	5388.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5388.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	511	511	510	510	510	49
15°	510	509	507	505	506	145
25°	518	519	520	515	512	241
35°	573	577	584	574	570	366
45°	748	748	761	749	745	584
55°	987	990	1040	994	989	888
65°	1260	1265	1402	1283	1278	1255
75°	1245	1324	1727	1433	1342	1268
85°	32	86	272	69	21	202
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5
2.5°	511.4	511.6	511.5	511.2	511.4	511.2	510.9	510.8	509.8	510.4	511.2
5°	511.4	511.1	510.9	510.8	510.8	511.2	510.8	510.4	510.2	510.5	510.1
7.5°	511.0	510.5	510.2	510.1	510.2	510.4	509.9	509.4	509.8	509.4	508.8
10°	510.2	509.8	509.9	509.4	509.5	509.4	508.8	508.4	508.7	508.2	507.6
12.5°	510.5	509.8	509.7	509.4	509.2	509.1	508.4	507.7	507.8	507.6	506.8
15°	510.5	510.1	510.0	509.4	509.2	509.0	508.1	507.8	507.8	507.4	506.6
17.5°	510.8	510.5	510.5	509.8	509.5	509.4	508.4	507.9	508.4	507.5	506.9
20°	511.6	511.4	511.5	511.0	510.5	510.5	509.8	509.5	509.6	509.5	508.0
22.5°	513.3	513.3	513.6	513.5	513.3	513.5	512.9	512.9	513.1	513.0	511.8
25°	518.2	518.0	518.3	518.3	518.4	519.4	519.0	518.8	519.5	519.6	518.3
27.5°	527.2	526.9	527.2	527.4	528.1	529.4	529.2	529.6	530.7	530.4	529.3
30°	537.6	537.3	538.0	538.9	539.4	541.4	540.6	542.7	543.7	544.5	543.7
32.5°	552.8	552.8	554.1	554.7	556.0	557.9	558.2	560.0	561.2	562.6	561.6
35°	573.2	572.9	573.9	574.9	576.4	578.3	579.0	581.2	583.2	584.2	582.3
37.5°	604.2	602.7	604.6	605.1	606.4	606.8	608.8	611.6	613.7	613.4	612.2
40°	646.3	646.0	645.4	644.5	646.4	647.2	647.2	651.0	654.4	653.8	653.6
42.5°	695.4	694.2	693.3	693.3	694.4	694.8	699.1	702.0	704.4	704.9	704.3
45°	748.2	747.0	747.2	746.7	747.1	748.9	751.5	756.8	761.2	761.4	759.0
47.5°	805.0	801.0	804.2	799.8	802.5	803.9	810.2	817.8	825.8	827.2	825.0
50°	862.6	862.2	861.9	861.1	862.4	865.4	873.2	885.2	892.8	897.9	894.6
52.5°	925.6	923.4	922.5	921.1	922.4	928.4	939.3	949.7	963.4	969.2	964.5
55°	986.8	986.1	982.4	982.4	985.0	994.4	1006.3	1019.2	1034.0	1040.5	1038.8
57.5°	1049.8	1045.7	1044.6	1042.9	1048.2	1057.2	1071.7	1094.8	1110.2	1117.6	1113.4
60°	1111.4	1108.2	1105.9	1105.3	1109.0	1121.4	1142.2	1170.1	1189.2	1198.8	1192.0
62.5°	1177.4	1175.5	1172.6	1169.4	1177.2	1193.1	1219.1	1249.8	1277.9	1289.8	1279.5
65°	1259.6	1255.5	1252.4	1248.3	1254.7	1274.7	1307.3	1350.6	1388.4	1402.2	1394.9
67.5°	1346.2	1342.5	1342.8	1340.2	1351.5	1379.3	1421.4	1480.3	1530.8	1554.4	1540.6
70°	1421.9	1424.1	1424.6	1434.9	1454.4	1496.8	1566.8	1659.0	1735.6	1771.7	1756.8
71°	1399.6	1404.3	1411.5	1422.2	1455.9	1506.0	1601.6	1713.2	1804.7	1865.7	1845.2
72.5°	1336.4	1339.2	1342.9	1359.2	1397.3	1463.6	1562.0	1689.6	1807.2	1886.2	1862.4
75°	1244.9	1247.6	1248.9	1260.3	1294.9	1352.8	1442.8	1556.1	1659.8	1727.0	1720.4
77.5°	1106.8	1107.3	1117.2	1134.8	1173.6	1239.9	1334.7	1452.2	1549.8	1602.0	1568.8
80°	794.8	789.4	799.6	822.4	870.4	946.4	1043.5	1177.6	1285.9	1334.7	1283.3
82.5°	302.4	318.8	344.6	382.2	398.4	482.8	573.5	652.2	743.4	845.4	819.8
85°	32.4	36.6	45.9	56.9	71.9	99.4	137.4	187.5	231.1	271.6	241.1
87.5°	12.2	12.4	13.8	16.0	16.2	17.0	18.1	21.0	19.6	17.0	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5
2.5°	510.5	510.6	510.5	510.6	510.6	510.1	510.2	510.0
5°	510.4	510.0	510.0	510.2	510.0	510.4	509.9	510.2
7.5°	509.7	508.8	509.1	509.1	508.8	509.2	509.0	508.8
10°	508.3	507.2	507.7	507.4	507.2	507.4	507.4	507.4
12.5°	507.0	506.2	506.4	506.3	506.1	506.6	506.4	506.6
15°	506.7	505.6	505.4	505.1	505.3	505.6	505.6	506.0
17.5°	506.4	505.0	504.9	504.6	504.7	505.3	505.4	505.1
20°	507.3	506.1	505.8	505.6	505.4	506.2	506.0	506.0
22.5°	511.2	509.8	509.6	508.5	508.1	508.5	508.3	508.2
25°	517.6	515.9	515.3	513.8	512.6	512.6	512.2	511.9
27.5°	529.0	526.5	525.9	524.6	523.1	523.3	522.5	522.4
30°	542.3	540.0	538.0	536.2	534.4	533.7	532.7	532.5
32.5°	559.6	557.1	554.7	552.4	549.9	548.9	547.2	546.4
35°	581.0	577.6	574.8	573.2	570.7	569.4	568.3	569.6
37.5°	610.8	606.6	605.2	603.4	601.7	599.8	600.2	599.8
40°	652.0	648.3	646.9	643.6	643.2	641.0	642.4	640.9
42.5°	702.9	696.2	695.2	692.6	691.8	690.5	691.1	690.1
45°	758.4	752.4	751.2	747.1	747.2	744.3	745.4	745.4
47.5°	820.8	814.5	809.2	806.3	805.1	803.3	804.3	804.2
50°	885.2	876.6	870.8	865.0	862.5	863.2	861.2	864.6
52.5°	954.4	941.5	933.3	927.8	923.0	924.0	924.3	925.3
55°	1025.9	1009.6	997.7	990.5	986.1	986.4	987.6	988.8
57.5°	1098.0	1077.5	1061.4	1050.6	1047.8	1049.1	1049.1	1048.9
60°	1172.6	1148.1	1127.4	1115.2	1112.6	1112.0	1117.4	1115.6
62.5°	1252.8	1223.4	1201.9	1186.3	1182.6	1185.2	1190.1	1189.0
65°	1359.1	1318.3	1290.7	1275.2	1269.1	1271.6	1278.2	1278.0
67.5°	1496.2	1439.2	1402.6	1382.8	1378.3	1381.5	1385.1	1388.6
70°	1701.2	1619.8	1567.5	1524.7	1506.4	1502.9	1506.5	1506.6
71°	1773.4	1679.8	1596.6	1544.4	1514.3	1501.6	1502.6	1496.2
72.5°	1770.4	1655.0	1557.8	1503.2	1461.4	1451.2	1446.2	1438.6
75°	1651.1	1547.2	1462.8	1403.2	1363.0	1350.9	1342.2	1341.8
77.5°	1497.4	1420.7	1327.6	1264.6	1215.6	1195.6	1186.8	1186.4
80°	1203.7	1088.9	1020.8	982.9	923.7	906.7	888.6	881.8
82.5°	727.9	568.8	462.5	411.0	382.5	315.0	282.6	267.4
85°	169.6	120.4	83.0	54.5	39.3	31.2	24.0	21.2
87.5°	11.4	9.0	8.0	6.5	5.0	4.8	3.0	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)