

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: P148375

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148375
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5251.0 lumens
Efficiency: N/A
Efficacy: 95.5 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

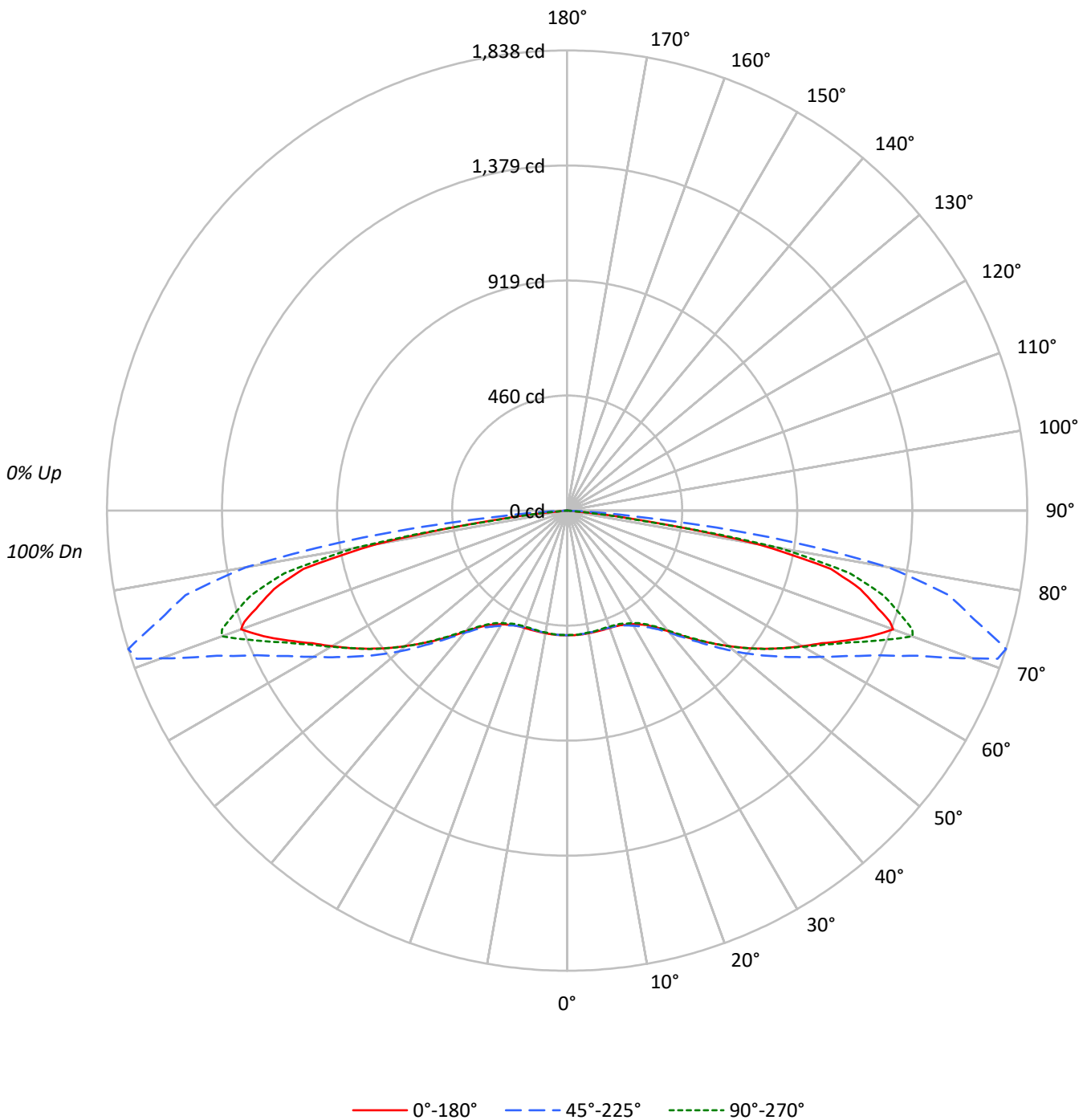
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	16227	16227	16227
5°	16319	16289	16280
10°	16468	16405	16378
15°	16800	16699	16655
20°	17307	17238	17120
25°	18175	18222	17955
30°	19732	19988	19548
35°	22243	22673	22100
40°	26817	27132	26595
45°	33637	34228	33508
50°	42661	44406	42757
55°	54695	57664	54798
60°	70650	76215	70924
65°	94747	105467	96121
70°	132162	164663	140039
75°	152895	212114	164792
80°	145500	244341	161429
85°	11826	99064	7710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	0.9
10°-20°	140.3	2.7
20°-30°	234.9	4.5
30°-40°	358.1	6.8
40°-50°	571.7	10.9
50°-60°	879.1	16.7
60°-70°	1280.0	24.4
70°-80°	1441.9	27.5
80°-90°	297.7	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°	422.6	8.0
0°-40°	780.6	14.9
0°-60°	2231.5	42.5
0°-90°	5251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5251.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	498	498	498	497	497	48
15°	498	496	494	492	493	141
25°	505	506	506	501	499	235
35°	559	563	569	559	555	357
45°	729	729	742	730	726	569
55°	962	965	1014	969	964	865
65°	1228	1232	1366	1250	1245	1223
75°	1213	1290	1683	1397	1308	1236
85°	32	83	265	67	21	197
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°	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
2.5°	498.4	498.6	498.5	498.2	498.3	498.2	497.9	497.8	496.8	497.4	498.2
5°	498.4	498.1	497.9	497.8	497.8	498.2	497.8	497.4	497.2	497.5	497.1
7.5°	498.0	497.6	497.3	497.1	497.2	497.4	497.0	496.4	496.8	496.4	495.9
10°	497.2	496.8	497.0	496.4	496.6	496.4	495.9	495.4	495.8	495.3	494.6
12.5°	497.5	496.8	496.7	496.4	496.3	496.1	495.4	494.8	494.9	494.6	493.9
15°	497.5	497.1	497.0	496.4	496.3	496.0	495.2	494.9	494.9	494.5	493.7
17.5°	497.8	497.5	497.5	496.8	496.6	496.4	495.5	495.0	495.5	494.6	494.1
20°	498.6	498.4	498.5	498.1	497.5	497.6	496.8	496.6	496.7	496.6	495.0
22.5°	500.3	500.3	500.6	500.4	500.3	500.4	499.9	499.9	500.0	500.0	498.8
25°	505.0	504.8	505.1	505.1	505.2	506.2	505.8	505.6	506.3	506.3	505.1
27.5°	513.8	513.5	513.8	514.0	514.7	516.0	515.7	516.1	517.2	516.9	515.8
30°	523.9	523.7	524.4	525.2	525.7	527.6	526.8	528.9	529.8	530.7	529.8
32.5°	538.8	538.8	540.0	540.6	541.8	543.7	544.0	545.7	546.9	548.3	547.3
35°	558.6	558.3	559.3	560.2	561.8	563.6	564.2	566.4	568.4	569.4	567.6
37.5°	588.9	587.3	589.2	589.7	591.0	591.3	593.2	596.0	598.1	597.8	596.6
40°	629.8	629.6	628.9	628.1	630.0	630.7	630.7	634.4	637.7	637.2	637.0
42.5°	677.8	676.6	675.7	675.7	676.8	677.1	681.3	684.1	686.4	686.9	686.4
45°	729.2	728.0	728.2	727.7	728.1	729.9	732.4	737.5	741.9	742.0	739.7
47.5°	784.6	780.7	783.7	779.4	782.0	783.4	789.6	797.1	804.8	806.1	804.1
50°	840.7	840.2	840.0	839.2	840.4	843.4	851.0	862.7	870.1	875.1	871.8
52.5°	902.0	900.0	899.0	897.6	898.9	904.8	915.4	925.6	938.9	944.5	940.0
55°	961.8	961.1	957.5	957.4	960.0	969.2	980.7	993.2	1007.7	1014.0	1012.4
57.5°	1023.1	1019.1	1018.0	1016.4	1021.6	1030.2	1044.4	1067.0	1082.0	1089.2	1085.0
60°	1083.0	1080.0	1077.7	1077.2	1080.8	1092.8	1113.2	1140.4	1158.9	1168.3	1161.6
62.5°	1147.4	1145.5	1142.8	1139.6	1147.2	1162.8	1188.1	1218.1	1245.4	1257.0	1247.0
65°	1227.6	1223.6	1220.6	1216.5	1222.7	1242.3	1274.0	1316.3	1353.0	1366.5	1359.4
67.5°	1312.1	1308.3	1308.6	1306.1	1317.1	1344.2	1385.2	1442.6	1491.8	1514.8	1501.4
70°	1385.8	1387.9	1388.4	1398.4	1417.4	1458.7	1527.0	1616.8	1691.5	1726.6	1712.1
71°	1364.1	1368.6	1375.6	1386.0	1418.8	1467.6	1560.8	1669.6	1758.8	1818.2	1798.3
72.5°	1302.4	1305.2	1308.7	1324.7	1361.7	1426.4	1522.3	1646.6	1761.3	1838.2	1815.0
75°	1213.2	1215.9	1217.1	1228.2	1262.0	1318.4	1406.2	1516.5	1617.6	1683.1	1676.6
77.5°	1078.6	1079.1	1088.7	1105.9	1143.8	1208.3	1300.8	1415.2	1510.3	1561.2	1528.9
80°	774.6	769.4	779.3	801.4	848.2	922.2	1016.9	1147.6	1253.2	1300.8	1250.6
82.5°	294.7	310.7	335.8	372.5	388.3	470.6	558.9	635.7	724.6	823.8	799.0
85°	31.6	35.6	44.7	55.4	70.0	96.8	133.8	182.7	225.2	264.7	235.0
87.5°	11.8	12.1	13.5	15.6	15.8	16.5	17.6	20.5	19.2	16.5	13.4
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°	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
2.5°	497.5	497.6	497.5	497.7	497.7	497.1	497.3	497.0
5°	497.4	497.0	497.1	497.2	497.1	497.4	497.0	497.2
7.5°	496.7	495.9	496.2	496.2	495.9	496.3	496.0	495.9
10°	495.3	494.2	494.8	494.5	494.4	494.5	494.5	494.5
12.5°	494.1	493.4	493.6	493.4	493.3	493.7	493.6	493.6
15°	493.8	492.7	492.6	492.3	492.4	492.7	492.7	493.2
17.5°	493.6	492.2	492.0	491.8	491.9	492.4	492.6	492.3
20°	494.4	493.3	493.0	492.7	492.6	493.3	493.1	493.2
22.5°	498.2	496.8	496.7	495.6	495.2	495.6	495.3	495.3
25°	504.4	502.7	502.2	500.7	499.6	499.6	499.2	498.9
27.5°	515.6	513.0	512.5	511.3	509.8	510.0	509.2	509.0
30°	528.4	526.2	524.3	522.6	520.8	520.1	519.1	519.0
32.5°	545.4	542.9	540.6	538.4	535.9	535.0	533.2	532.4
35°	566.2	562.9	560.1	558.6	556.1	554.9	553.8	555.0
37.5°	595.2	591.2	589.8	588.0	586.4	584.5	584.9	584.5
40°	635.4	631.8	630.4	627.2	626.8	624.7	626.0	624.6
42.5°	685.0	678.4	677.5	675.0	674.2	673.0	673.5	672.6
45°	739.1	733.2	732.1	728.1	728.2	725.3	726.4	726.4
47.5°	800.0	793.8	788.7	785.8	784.7	782.9	783.8	783.7
50°	862.7	854.3	848.6	843.0	840.5	841.2	839.3	842.6
52.5°	930.1	917.6	909.6	904.2	899.6	900.5	900.8	901.8
55°	999.8	983.9	972.4	965.4	961.1	961.3	962.6	963.6
57.5°	1070.0	1050.1	1034.4	1023.9	1021.2	1022.4	1022.4	1022.2
60°	1142.8	1118.9	1098.6	1086.8	1084.4	1083.6	1089.0	1087.2
62.5°	1221.0	1192.2	1171.2	1156.1	1152.6	1155.0	1159.9	1158.8
65°	1324.6	1284.8	1257.8	1242.8	1236.8	1239.2	1245.7	1245.4
67.5°	1458.2	1402.6	1366.9	1347.7	1343.3	1346.3	1349.9	1353.3
70°	1657.9	1578.6	1527.6	1486.0	1468.0	1464.6	1468.2	1468.4
71°	1728.2	1637.0	1556.0	1505.1	1475.8	1463.4	1464.4	1458.2
72.5°	1725.4	1613.0	1518.2	1464.9	1424.2	1414.3	1409.4	1402.0
75°	1609.1	1507.8	1425.6	1367.5	1328.3	1316.6	1308.1	1307.6
77.5°	1459.3	1384.5	1293.9	1232.4	1184.6	1165.2	1156.6	1156.3
80°	1173.1	1061.2	994.9	957.9	900.2	883.6	866.0	859.4
82.5°	709.4	554.4	450.8	400.5	372.7	307.0	275.5	260.6
85°	165.2	117.4	80.9	53.1	38.2	30.4	23.4	20.6
87.5°	11.1	8.8	7.8	6.3	4.8	4.7	2.9	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)