

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: P147334

Luminaire Tested: **TLM-F02-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147334  
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-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (14) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4861.4 lumens  
Efficiency: N/A  
Efficacy: 88.4 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

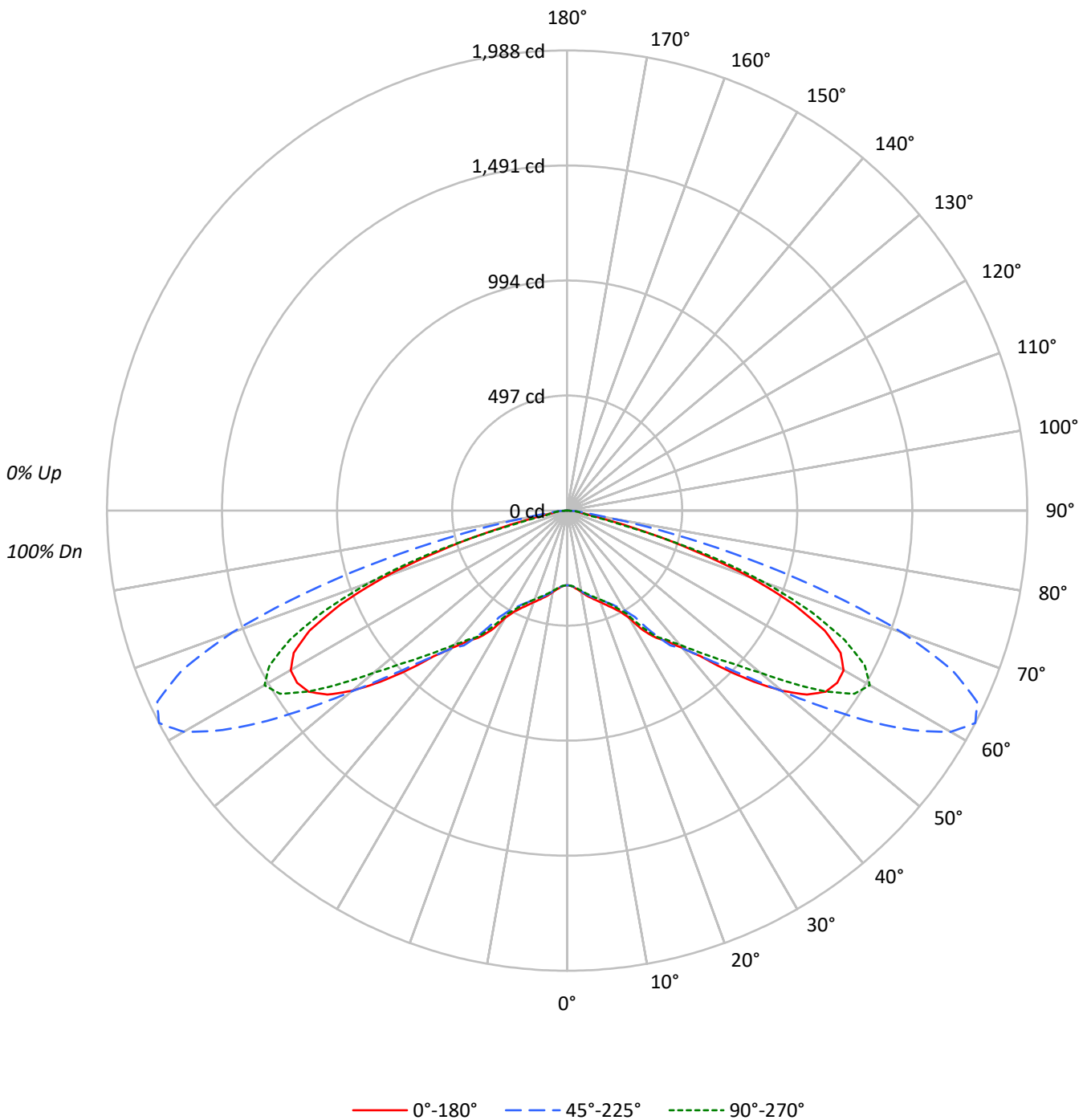
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	10526	10526	10526
5°	10880	10821	10795
10°	11837	11712	11655
15°	13136	12893	12765
20°	14607	14256	14134
25°	16671	15994	16120
30°	20135	18779	19423
35°	26735	25751	26400
40°	32961	33059	32212
45°	44902	43629	41437
50°	61411	61726	55327
55°	77562	90112	77465
60°	89967	124744	98474
65°	94739	150795	102033
70°	80367	147001	86385
75°	40769	103190	35413
80°	12942	35840	13036
85°	13997	18638	14296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	0.7
10°-20°	109.3	2.2
20°-30°	211.4	4.3
30°-40°	409.3	8.4
40°-50°	738.9	15.2
50°-60°	1284.9	26.4
60°-70°	1458.7	30.0
70°-80°	565.5	11.6
80°-90°	51.0	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°	353.0	7.3
0°-40°	762.3	15.7
0°-60°	2786.1	57.3
0°-90°	4861.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4861.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	323	323	323	323	323	
5°	332	332	330	330	330	33
15°	389	386	382	379	378	111
25°	463	454	444	445	448	218
35°	671	658	647	658	663	419
45°	973	951	946	909	898	762
55°	1364	1430	1585	1410	1362	1201
65°	1228	1409	1954	1517	1322	1170
75°	324	452	819	428	281	392
85°	37	54	50	54	38	37
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°	322.7	322.7	322.7	322.7	322.7	322.7	322.7	322.7	322.7	322.7	322.7
2.5°	324.8	325.8	325.5	325.0	325.0	325.0	324.8	324.0	323.8	324.2	324.8
5°	332.3	332.3	332.3	332.3	331.8	331.8	331.2	330.8	331.0	330.5	330.2
7.5°	343.8	343.0	343.0	342.8	342.8	342.3	341.5	340.5	340.8	340.5	340.3
10°	357.4	357.6	356.8	357.6	356.4	356.2	355.2	354.6	354.4	353.6	353.6
12.5°	373.7	373.0	373.0	372.5	372.0	371.5	370.0	369.7	368.7	368.2	367.4
15°	389.0	388.8	387.8	386.8	386.6	386.0	384.2	383.2	383.0	381.8	380.8
17.5°	404.4	403.9	402.6	402.2	401.1	400.4	398.8	397.4	396.6	396.1	394.8
20°	420.8	420.2	419.0	418.0	416.7	415.7	413.4	412.2	411.4	410.7	409.7
22.5°	441.1	440.1	438.1	436.4	433.6	432.6	429.6	427.8	426.6	425.5	425.0
25°	463.2	463.4	460.7	458.4	455.2	452.4	448.6	446.6	445.4	444.4	444.1
27.5°	490.8	491.1	488.6	485.3	480.3	477.2	472.2	469.8	469.0	468.0	467.7
30°	534.6	532.3	528.0	522.8	518.2	511.7	504.4	501.9	499.4	498.6	498.6
32.5°	615.0	613.8	610.2	597.2	591.1	577.6	564.8	557.4	549.2	545.1	542.6
35°	671.4	670.8	668.0	663.6	659.7	657.0	649.4	648.2	646.7	646.7	648.6
37.5°	712.8	709.8	709.2	710.0	709.0	709.5	715.6	723.8	730.8	734.4	733.8
40°	774.1	769.8	772.3	770.6	768.3	767.8	769.8	773.1	776.4	776.4	775.6
42.5°	854.2	856.3	857.3	850.0	845.2	844.0	848.7	847.8	851.0	849.8	846.5
45°	973.4	972.2	970.4	961.6	954.0	948.0	949.3	947.5	947.8	945.8	943.2
47.5°	1093.6	1097.8	1090.6	1086.2	1077.7	1073.4	1077.0	1074.0	1079.7	1069.2	1064.2
50°	1210.2	1213.2	1210.6	1204.6	1204.6	1210.6	1214.9	1220.4	1228.5	1216.4	1198.4
52.5°	1305.6	1308.2	1312.0	1317.0	1329.2	1342.2	1360.2	1379.6	1394.9	1392.6	1372.0
55°	1363.9	1366.9	1373.2	1390.6	1412.8	1446.4	1487.4	1532.4	1567.6	1584.6	1569.6
57.5°	1383.6	1385.8	1403.0	1423.8	1458.2	1508.2	1576.8	1654.5	1722.2	1765.1	1758.3
60°	1379.1	1379.1	1396.4	1425.0	1473.3	1539.6	1636.7	1744.2	1847.8	1912.2	1902.6
62.5°	1331.6	1334.1	1359.0	1393.4	1451.6	1531.1	1646.7	1784.2	1908.1	1988.0	1980.2
65°	1227.5	1229.2	1256.2	1297.1	1362.2	1456.2	1582.6	1734.9	1876.9	1953.8	1939.2
67.5°	1059.4	1061.2	1083.0	1129.2	1198.1	1296.4	1432.8	1600.5	1739.5	1800.2	1756.6
70°	842.7	847.8	861.8	910.8	963.1	1059.4	1185.0	1352.6	1483.8	1541.4	1493.2
72.5°	574.3	587.1	604.2	647.7	697.7	777.6	877.6	1018.9	1124.2	1190.8	1147.8
75°	323.5	341.6	346.8	379.8	421.0	484.0	557.2	658.5	764.8	818.8	767.0
77.5°	139.8	154.6	161.1	176.4	208.6	235.0	279.5	347.8	430.0	468.0	405.9
80°	68.9	72.4	75.2	80.0	89.0	97.5	118.6	148.5	182.2	190.8	151.8
82.5°	53.3	55.8	60.6	64.4	66.6	68.8	70.9	74.9	78.2	79.9	75.4
85°	37.4	40.8	46.0	50.2	52.8	54.5	56.3	57.6	54.6	49.8	52.2
87.5°	9.8	12.8	17.8	19.4	21.9	23.2	22.6	23.4	21.1	15.3	17.1
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°	322.7	322.7	322.7	322.7	322.7	322.7	322.7	322.7
2.5°	324.5	324.2	324.4	324.4	324.4	324.2	324.2	324.2
5°	330.2	330.2	330.5	330.0	330.0	330.2	330.0	329.7
7.5°	340.0	339.8	339.8	339.6	339.8	339.6	339.6	339.3
10°	353.2	352.6	352.8	352.1	352.1	351.8	351.9	351.9
12.5°	367.2	366.4	366.7	366.0	364.7	365.0	365.2	364.9
15°	380.8	380.0	379.2	378.8	378.0	378.2	378.2	378.0
17.5°	394.6	393.1	392.8	392.0	391.8	391.8	391.8	392.1
20°	408.9	407.9	407.7	406.9	406.7	407.4	407.7	407.2
22.5°	424.2	423.8	424.2	423.8	424.5	425.0	425.2	424.7
25°	443.6	443.1	443.8	445.6	446.6	447.1	448.4	447.9
27.5°	468.5	468.0	469.8	472.2	473.8	476.3	477.5	478.0
30°	500.6	502.9	504.0	509.0	510.0	514.0	514.0	515.7
32.5°	547.4	551.7	559.2	567.0	577.8	585.6	585.6	589.6
35°	650.0	651.7	657.5	658.8	661.0	663.5	661.0	663.0
37.5°	728.6	720.8	715.3	707.5	702.8	702.7	703.2	702.7
40°	768.8	765.8	763.3	756.8	755.8	755.5	755.5	756.5
42.5°	840.7	833.4	829.4	823.8	822.2	821.6	821.4	821.9
45°	934.2	922.4	911.6	906.0	901.2	896.8	898.2	898.3
47.5°	1043.1	1024.7	1007.1	997.5	989.2	985.4	983.0	982.2
50°	1175.5	1149.8	1127.2	1109.4	1097.3	1097.0	1098.4	1090.3
52.5°	1337.8	1297.4	1269.2	1245.1	1233.8	1232.6	1228.5	1224.0
55°	1517.8	1469.8	1423.3	1397.4	1382.6	1374.5	1369.8	1362.2
57.5°	1703.3	1638.7	1571.8	1530.4	1504.2	1486.1	1476.6	1472.3
60°	1846.3	1758.1	1669.8	1603.2	1559.8	1532.9	1516.3	1509.5
62.5°	1902.6	1783.0	1669.8	1582.4	1519.6	1482.4	1460.0	1450.2
65°	1835.4	1693.7	1565.0	1468.6	1398.4	1356.9	1332.6	1322.0
67.5°	1648.0	1522.8	1382.8	1286.8	1214.6	1173.7	1147.4	1139.5
70°	1381.6	1253.6	1119.9	1034.2	969.8	936.4	909.0	905.8
72.5°	1038.2	927.9	813.3	742.4	690.6	635.4	621.3	628.3
75°	665.6	562.2	460.2	396.4	349.1	296.3	276.0	281.0
77.5°	315.2	244.0	176.2	136.2	114.4	97.8	93.5	91.0
80°	116.8	94.8	83.7	79.4	76.4	73.6	71.6	69.4
82.5°	75.6	73.8	71.6	70.8	68.6	65.1	58.6	55.8
85°	56.6	56.6	53.5	53.8	52.0	47.5	41.4	38.2
87.5°	16.6	14.8	13.6	12.6	12.4	11.1	8.0	7.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)