

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: P147853

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147853
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33675)
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-E1-5WQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

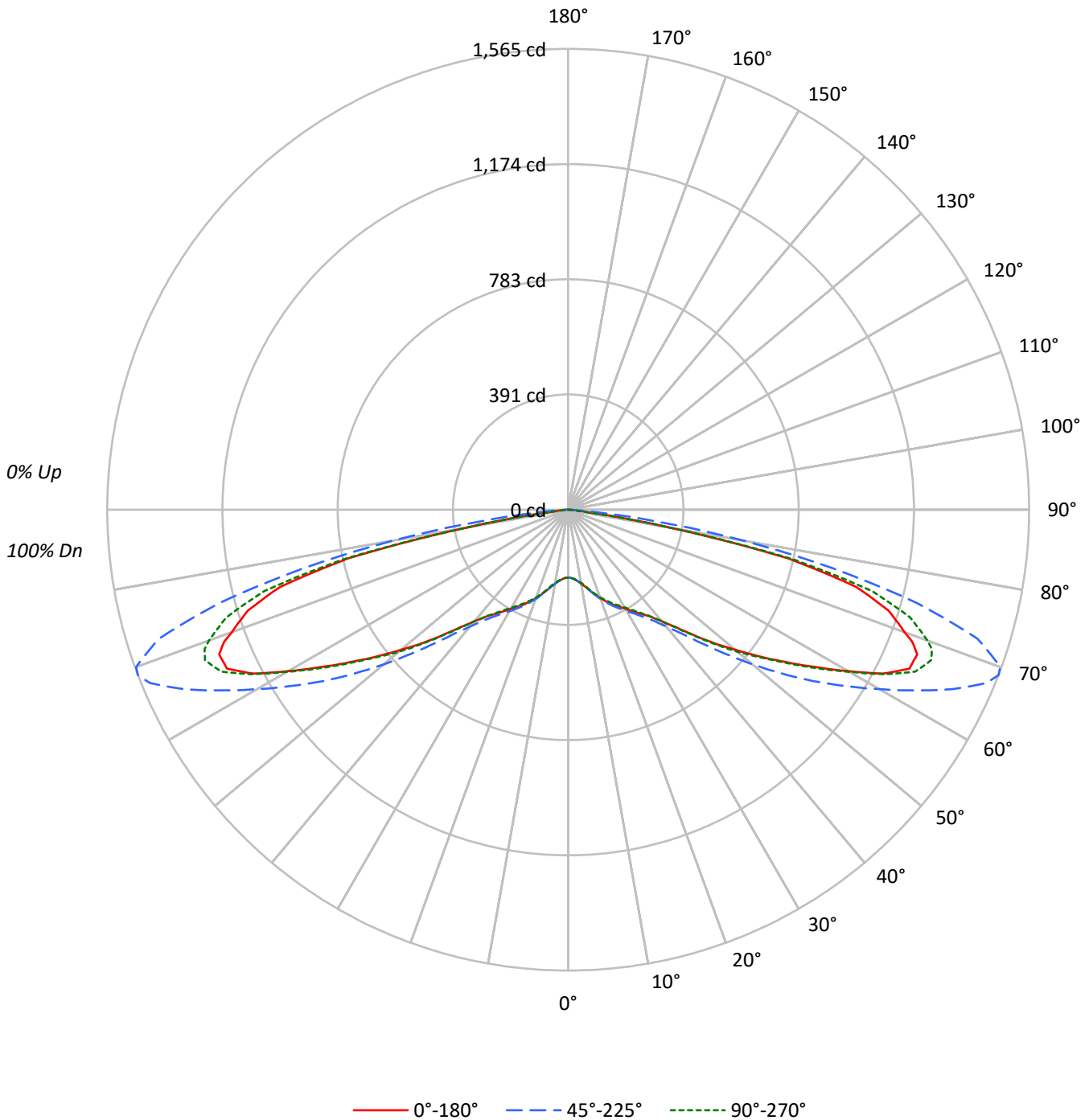
Lumens per Lamp: N/A
Luminaire Lumens: 4436.5 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): 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	103	96	90	84	100	94	88	82	89	84	80	85	81	77	81	78	75	72
2	89	77	67	58	86	75	65	58	71	63	56	67	60	55	64	58	53	51
3	78	63	51	42	75	61	50	42	58	48	41	54	46	40	52	45	39	36
4	69	52	41	31	66	51	40	31	48	38	31	45	37	30	43	36	29	27
5	62	45	33	24	59	44	32	24	41	31	24	39	30	23	37	29	23	20
6	56	39	28	19	54	38	27	19	36	26	19	34	25	19	32	24	18	16
7	51	34	24	16	49	34	23	16	32	22	16	30	22	15	29	21	15	13
8	47	31	20	13	45	30	20	13	29	20	13	27	19	13	26	18	13	10
9	44	28	18	11	42	27	18	11	26	17	11	25	17	11	23	16	11	9
10	41	25	16	10	39	25	16	10	24	15	10	23	15	10	22	15	10	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7515	7515	7515
5°	7757	7757	7727
10°	8446	8429	8353
15°	9584	9631	9489
20°	11094	11191	10997
25°	12773	12971	12589
30°	14625	14956	14452
35°	17202	17664	17055
40°	21026	21992	21026
45°	27769	29569	27876
50°	37546	41438	38069
55°	51323	57664	51613
60°	71512	79509	71786
65°	98621	111310	100342
70°	115882	148889	123769
75°	127500	154773	134583
80°	64485	112816	66401
85°	8346	30614	6437



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	0.5
10°-20°	81.7	1.8
20°-30°	165.4	3.7
30°-40°	277.3	6.3
40°-50°	489.2	11.0
50°-60°	862.7	19.4
60°-70°	1317.0	29.7
70°-80°	1100.5	24.8
80°-90°	119.6	2.7
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°	270.2	6.1
0°-40°	547.6	12.3
0°-60°	1899.4	42.8
0°-90°	4436.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4436.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	230	230	230	230	230	
5°	237	237	237	236	236	23
15°	284	285	285	283	281	82
25°	355	357	360	354	350	165
35°	432	435	444	434	428	274
45°	602	616	641	621	604	473
55°	902	945	1014	953	908	818
65°	1278	1347	1442	1358	1300	1223
75°	1012	1069	1228	1137	1068	974
85°	22	37	82	32	17	73
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°	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4
2.5°	232.2	232.7	232.2	232.2	232.2	232.2	232.2	231.8	231.8	231.8	232.2
5°	236.9	237.4	236.9	237.4	237.4	237.4	237.4	236.9	236.9	236.9	236.9
7.5°	244.3	244.3	244.3	244.8	244.3	244.3	244.8	244.3	244.3	244.3	244.3
10°	255.0	254.5	254.5	254.5	254.5	254.5	255.0	255.0	255.0	254.5	254.5
12.5°	268.0	267.5	268.0	268.0	268.5	268.5	268.5	268.5	268.5	268.5	268.0
15°	283.8	283.8	283.8	284.3	285.2	285.2	284.7	285.2	285.2	285.2	285.2
17.5°	301.5	302.4	301.5	301.9	302.4	301.9	302.8	303.3	303.8	303.3	301.9
20°	319.6	320.0	320.0	320.0	320.0	321.0	321.4	321.4	322.8	322.4	321.9
22.5°	336.8	337.7	337.7	338.1	338.1	339.5	339.5	339.5	340.5	341.4	340.5
25°	354.9	354.4	354.4	355.3	355.8	357.7	357.7	358.6	360.0	360.4	359.5
27.5°	371.1	370.7	370.7	372.1	372.5	374.8	374.8	376.7	377.6	378.1	377.2
30°	388.3	388.3	387.8	389.2	390.6	392.5	393.4	395.3	396.7	397.1	396.2
32.5°	408.8	407.8	408.3	409.2	410.1	412.0	413.4	415.7	417.6	418.0	417.1
35°	432.0	430.6	431.0	432.0	433.4	436.2	438.5	439.9	442.7	443.6	441.7
37.5°	457.5	458.0	457.5	459.8	462.2	465.4	468.2	470.1	472.9	474.2	472.9
40°	493.8	492.4	493.8	496.1	499.8	504.0	509.5	510.9	513.7	516.5	513.3
42.5°	540.7	539.7	543.0	544.8	549.0	553.7	560.6	564.4	568.5	570.4	567.6
45°	602.0	602.0	605.7	606.2	612.7	618.7	628.5	633.1	641.0	641.0	641.0
47.5°	669.8	672.6	674.9	679.5	684.2	695.3	705.1	715.3	722.7	723.7	722.3
50°	739.9	742.7	749.7	756.2	766.4	780.3	791.0	804.5	811.0	816.6	814.7
52.5°	817.5	818.0	826.3	834.7	849.6	864.9	882.1	896.0	907.6	912.7	908.5
55°	902.5	903.4	910.9	919.7	936.4	954.1	975.4	989.8	1004.7	1014.0	1007.0
57.5°	994.5	994.9	1002.4	1013.1	1033.0	1050.7	1071.1	1091.6	1105.5	1113.8	1109.2
60°	1096.2	1098.5	1104.1	1117.6	1136.6	1155.2	1175.6	1193.7	1210.0	1218.8	1214.2
62.5°	1204.9	1207.2	1215.1	1225.8	1242.5	1262.9	1282.5	1305.7	1319.2	1328.9	1321.9
65°	1277.8	1282.0	1294.5	1308.9	1333.6	1360.0	1382.8	1414.4	1430.6	1442.2	1435.7
67.5°	1282.5	1284.8	1300.1	1321.9	1354.9	1394.9	1441.3	1490.5	1522.6	1537.9	1526.8
69°	1250.9	1254.1	1269.0	1293.6	1330.3	1376.7	1432.0	1493.3	1542.6	1565.3	1554.6
70°	1215.1	1222.1	1238.3	1265.3	1301.0	1349.8	1406.9	1472.4	1530.0	1561.2	1553.3
72.5°	1139.9	1141.7	1152.4	1173.8	1201.2	1241.6	1295.5	1357.2	1412.1	1456.6	1463.1
75°	1011.7	1017.7	1025.6	1040.0	1053.9	1083.2	1119.4	1161.7	1193.7	1228.1	1229.5
77.5°	764.6	782.7	788.7	792.0	798.0	821.2	852.8	889.5	916.0	921.5	920.6
80°	343.3	367.4	373.0	399.5	415.7	454.3	502.6	558.8	596.4	600.6	590.4
82.5°	67.4	72.0	84.1	105.0	143.1	165.8	197.4	236.9	273.1	294.0	281.5
85°	22.3	23.7	27.4	30.2	34.8	39.5	47.8	59.5	73.9	81.8	72.9
87.5°	8.8	8.8	10.2	11.1	12.1	12.1	12.1	11.1	10.7	8.8	7.9
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°	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4
2.5°	231.8	231.8	231.8	231.8	231.8	231.8	231.8	231.8
5°	236.9	236.4	236.4	236.0	236.0	236.0	236.0	236.0
7.5°	243.9	243.4	242.9	243.4	242.9	242.9	242.9	242.9
10°	254.5	253.6	253.1	252.7	252.7	252.7	252.2	252.2
12.5°	267.1	267.1	266.6	266.2	265.2	265.7	265.2	264.3
15°	284.3	283.3	282.9	282.4	281.5	281.5	281.5	281.0
17.5°	301.5	300.5	300.5	299.1	298.7	298.7	298.7	299.1
20°	320.5	319.1	318.2	317.2	316.3	316.8	315.9	316.8
22.5°	339.5	337.7	336.8	335.4	334.0	334.0	333.5	332.6
25°	358.1	355.8	354.9	353.5	351.6	351.6	350.7	349.8
27.5°	375.8	373.5	372.5	369.7	367.9	367.4	366.5	366.0
30°	395.3	392.5	391.1	388.3	385.5	385.1	383.7	383.7
32.5°	415.7	412.9	412.0	407.8	405.5	405.5	404.6	403.6
35°	441.3	437.1	436.2	432.0	428.7	428.7	427.8	428.3
37.5°	471.5	468.2	465.0	461.7	458.0	457.5	456.6	455.7
40°	511.9	508.2	504.4	499.8	496.5	495.6	494.2	493.8
42.5°	565.7	562.0	554.6	550.9	547.6	544.8	544.4	543.9
45°	634.5	629.8	624.7	617.8	613.6	607.6	606.6	604.3
47.5°	717.2	708.3	699.5	693.5	687.0	680.0	678.6	674.9
50°	805.0	798.0	783.1	773.4	763.2	756.2	751.5	750.2
52.5°	899.3	886.2	871.4	858.4	843.5	834.2	825.9	823.5
55°	997.7	979.1	960.6	945.2	930.4	919.2	911.3	907.6
57.5°	1096.2	1075.8	1055.3	1038.6	1026.1	1011.7	1003.8	1001.9
60°	1198.8	1179.3	1158.4	1141.7	1126.4	1113.8	1109.2	1100.4
62.5°	1307.5	1287.1	1267.6	1251.3	1231.8	1223.0	1215.1	1210.0
65°	1414.4	1390.7	1366.1	1348.9	1329.4	1316.8	1307.1	1300.1
67.5°	1497.1	1461.3	1428.3	1399.5	1373.0	1353.5	1341.0	1334.5
69°	1520.3	1475.7	1433.4	1395.8	1364.7	1342.8	1328.9	1322.4
70°	1517.5	1468.3	1421.8	1380.5	1346.6	1323.3	1309.9	1297.8
72.5°	1431.6	1386.5	1334.9	1289.9	1259.2	1236.9	1223.5	1217.0
75°	1221.6	1191.4	1154.3	1119.4	1097.1	1084.1	1067.4	1067.9
77.5°	889.5	890.4	865.3	829.6	804.5	799.9	792.4	785.0
80°	551.8	507.7	478.9	440.3	412.0	387.4	376.7	353.5
82.5°	254.5	198.8	154.2	116.6	89.6	70.1	61.3	50.2
85°	56.7	43.2	35.8	28.8	24.6	22.8	18.6	17.2
87.5°	7.9	7.0	6.5	6.0	5.1	3.7	2.8	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)