

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: P147854

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147854
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-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (14) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

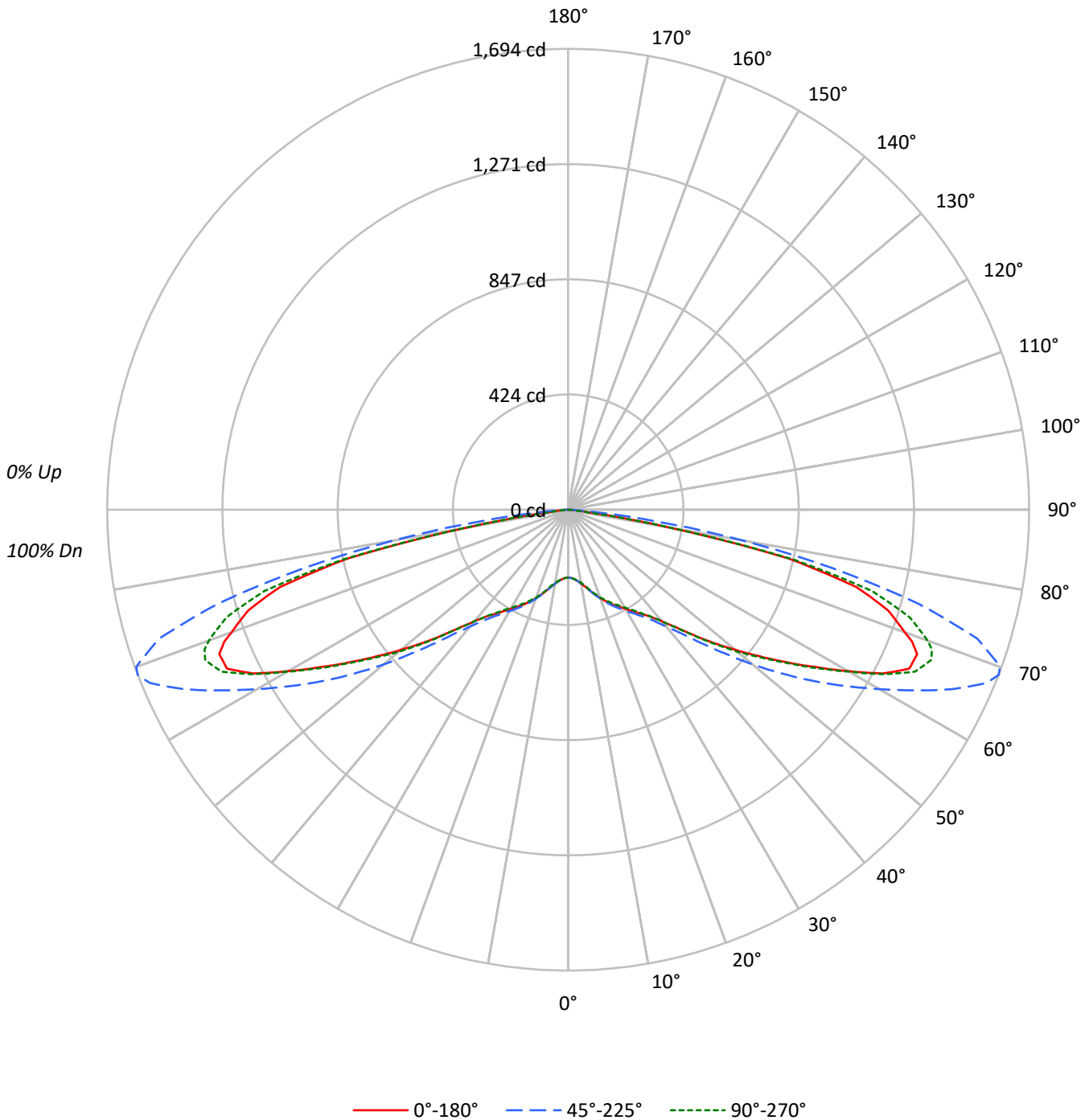
Lumens per Lamp: N/A
Luminaire Lumens: 4801.1 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 55
Input Voltage (V): NR
Input Current (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	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°	8132	8132	8132
5°	8395	8395	8362
10°	9141	9125	9039
15°	10370	10421	10269
20°	12003	12107	11899
25°	13820	14040	13622
30°	15826	16188	15638
35°	18615	19113	18456
40°	22750	23802	22750
45°	30053	31999	30168
50°	40631	44843	41194
55°	55543	62401	55855
60°	77389	86046	77683
65°	106725	120463	108593
70°	125409	161115	133935
75°	137973	167489	145636
80°	69782	122077	71848
85°	9019	33121	6961



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	0.5
10°-20°	88.4	1.8
20°-30°	179.0	3.7
30°-40°	300.1	6.3
40°-50°	529.4	11.0
50°-60°	933.6	19.4
60°-70°	1425.3	29.7
70°-80°	1191.0	24.8
80°-90°	129.4	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°	292.4	6.1
0°-40°	592.6	12.3
0°-60°	2055.5	42.8
0°-90°	4801.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4801.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	249	249	249	249	249	
5°	256	257	256	256	255	25
15°	307	309	309	306	304	88
25°	384	386	390	383	378	178
35°	468	470	480	470	464	297
45°	652	666	694	672	654	512
55°	977	1023	1097	1031	982	885
65°	1383	1457	1561	1469	1407	1324
75°	1095	1156	1329	1230	1156	1054
85°	24	40	88	35	19	79
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°	249.3	249.3	249.3	249.3	249.3	249.3	249.3	249.3	249.3	249.3	249.3
2.5°	251.3	251.8	251.3	251.3	251.3	251.3	251.3	250.8	250.8	250.8	251.3
5°	256.4	256.9	256.4	256.9	256.9	256.9	256.9	256.4	256.4	256.4	256.4
7.5°	264.4	264.4	264.4	264.9	264.4	264.4	264.9	264.4	264.4	264.4	264.4
10°	276.0	275.5	275.5	275.5	275.5	275.5	276.0	276.0	276.0	275.5	275.5
12.5°	290.0	289.5	290.0	290.0	290.5	290.5	290.5	290.5	290.5	290.5	290.0
15°	307.1	307.1	307.1	307.6	308.6	308.6	308.1	308.6	308.6	308.6	308.6
17.5°	326.2	327.2	326.2	326.7	327.2	326.7	327.7	328.2	328.7	328.2	326.7
20°	345.8	346.3	346.3	346.3	346.3	347.3	347.8	347.8	349.4	348.8	348.3
22.5°	364.4	365.4	365.4	365.9	365.9	367.4	367.4	367.4	368.5	369.5	368.5
25°	384.0	383.5	383.5	384.5	385.0	387.0	387.0	388.1	389.6	390.1	389.1
27.5°	401.6	401.1	401.1	402.6	403.1	405.6	405.6	407.7	408.7	409.2	408.2
30°	420.2	420.2	419.7	421.2	422.7	424.7	425.8	427.8	429.3	429.8	428.8
32.5°	442.3	441.3	441.8	442.8	443.9	445.9	447.4	449.9	451.9	452.4	451.4
35°	467.5	466.0	466.5	467.5	469.0	472.0	474.5	476.0	479.0	480.0	478.0
37.5°	495.1	495.6	495.1	497.6	500.1	503.7	506.7	508.7	511.7	513.2	511.7
40°	534.3	532.8	534.3	536.8	540.9	545.4	551.4	552.9	555.9	559.0	555.4
42.5°	585.1	584.1	587.6	589.6	594.1	599.2	606.7	610.7	615.3	617.3	614.3
45°	651.5	651.5	655.5	656.0	663.0	669.5	680.1	685.1	693.7	693.7	693.7
47.5°	724.8	727.9	730.4	735.4	740.4	752.5	763.0	774.1	782.1	783.1	781.6
50°	800.7	803.8	811.3	818.3	829.4	844.5	856.0	870.6	877.6	883.7	881.7
52.5°	884.7	885.2	894.2	903.3	919.4	936.0	954.6	969.6	982.2	987.7	983.2
55°	976.7	977.7	985.7	995.3	1013.4	1032.5	1055.6	1071.2	1087.3	1097.3	1089.8
57.5°	1076.2	1076.7	1084.7	1096.3	1117.9	1137.0	1159.1	1181.3	1196.3	1205.4	1200.4
60°	1186.3	1188.8	1194.8	1209.4	1230.0	1250.1	1272.2	1291.8	1309.4	1319.0	1314.0
62.5°	1303.9	1306.4	1315.0	1326.5	1344.6	1366.7	1387.9	1413.0	1427.6	1438.1	1430.6
65°	1382.8	1387.3	1400.9	1416.5	1443.1	1471.8	1496.4	1530.6	1548.2	1560.8	1553.7
67.5°	1387.9	1390.4	1407.0	1430.6	1466.3	1509.5	1559.8	1613.0	1647.7	1664.3	1652.3
69°	1353.7	1357.2	1373.3	1399.9	1439.6	1489.9	1549.7	1616.1	1669.3	1694.0	1682.4
70°	1315.0	1322.5	1340.1	1369.3	1408.0	1460.7	1522.6	1593.4	1655.8	1689.4	1680.9
72.5°	1233.5	1235.5	1247.1	1270.2	1299.9	1343.6	1401.9	1468.8	1528.1	1576.3	1583.4
75°	1094.8	1101.3	1109.9	1125.5	1140.5	1172.2	1211.4	1257.2	1291.8	1329.0	1330.5
77.5°	827.4	847.0	853.5	857.0	863.6	888.7	922.9	962.6	991.3	997.3	996.3
80°	371.5	397.6	403.6	432.3	449.9	491.6	543.9	604.7	645.4	649.9	638.9
82.5°	72.9	77.9	91.0	113.6	154.8	179.5	213.6	256.4	295.6	318.2	304.6
85°	24.1	25.6	29.7	32.7	37.7	42.7	51.8	64.3	79.9	88.5	78.9
87.5°	9.6	9.6	11.1	12.1	13.1	13.1	13.1	12.1	11.6	9.6	8.5
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°	249.3	249.3	249.3	249.3	249.3	249.3	249.3	249.3
2.5°	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8
5°	256.4	255.9	255.9	255.4	255.4	255.4	255.4	255.4
7.5°	263.9	263.4	262.9	263.4	262.9	262.9	262.9	262.9
10°	275.5	274.5	274.0	273.4	273.4	273.4	272.9	272.9
12.5°	289.0	289.0	288.5	288.0	287.0	287.5	287.0	286.0
15°	307.6	306.6	306.1	305.6	304.6	304.6	304.6	304.1
17.5°	326.2	325.2	325.2	323.7	323.2	323.2	323.2	323.7
20°	346.8	345.3	344.3	343.3	342.3	342.8	341.8	342.8
22.5°	367.4	365.4	364.4	362.9	361.4	361.4	360.9	359.9
25°	387.6	385.0	384.0	382.5	380.5	380.5	379.5	378.5
27.5°	406.7	404.1	403.1	400.1	398.1	397.6	396.6	396.1
30°	427.8	424.7	423.2	420.2	417.2	416.7	415.2	415.2
32.5°	449.9	446.9	445.9	441.3	438.8	438.8	437.8	436.8
35°	477.5	473.0	472.0	467.5	464.0	464.0	463.0	463.5
37.5°	510.2	506.7	503.2	499.6	495.6	495.1	494.1	493.1
40°	553.9	549.9	545.9	540.9	537.3	536.3	534.8	534.3
42.5°	612.2	608.2	600.2	596.2	592.6	589.6	589.1	588.6
45°	686.6	681.6	676.1	668.5	664.0	657.5	656.5	654.0
47.5°	776.1	766.6	757.0	750.5	743.4	735.9	734.4	730.4
50°	871.1	863.6	847.5	836.9	825.9	818.3	813.3	811.8
52.5°	973.2	959.1	943.0	928.9	912.8	902.8	893.7	891.2
55°	1079.7	1059.6	1039.5	1022.9	1006.8	994.8	986.2	982.2
57.5°	1186.3	1164.2	1142.0	1124.0	1110.4	1094.8	1086.3	1084.2
60°	1297.4	1276.3	1253.6	1235.5	1219.0	1205.4	1200.4	1190.8
62.5°	1415.0	1392.9	1371.8	1354.2	1333.1	1323.5	1315.0	1309.4
65°	1530.6	1505.0	1478.3	1459.7	1438.6	1425.0	1414.5	1407.0
67.5°	1620.1	1581.4	1545.7	1514.5	1485.9	1464.8	1451.2	1444.1
69°	1645.2	1597.0	1551.2	1510.5	1476.8	1453.2	1438.1	1431.1
70°	1642.2	1588.9	1538.6	1493.9	1457.2	1432.1	1417.5	1404.4
72.5°	1549.2	1500.4	1444.7	1395.9	1362.7	1338.6	1324.0	1317.0
75°	1322.0	1289.3	1249.1	1211.4	1187.3	1173.2	1155.1	1155.6
77.5°	962.6	963.6	936.5	897.8	870.6	865.6	857.5	849.5
80°	597.2	549.4	518.2	476.5	445.9	419.2	407.7	382.5
82.5°	275.5	215.1	166.9	126.2	97.0	75.9	66.4	54.3
85°	61.3	46.7	38.7	31.2	26.6	24.6	20.1	18.6
87.5°	8.5	7.5	7.0	6.5	5.5	4.0	3.0	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)