

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: P147848

Luminaire Tested: **TLM-E02-LED-E1-5WQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147848
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-E02-LED-E1-5WQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

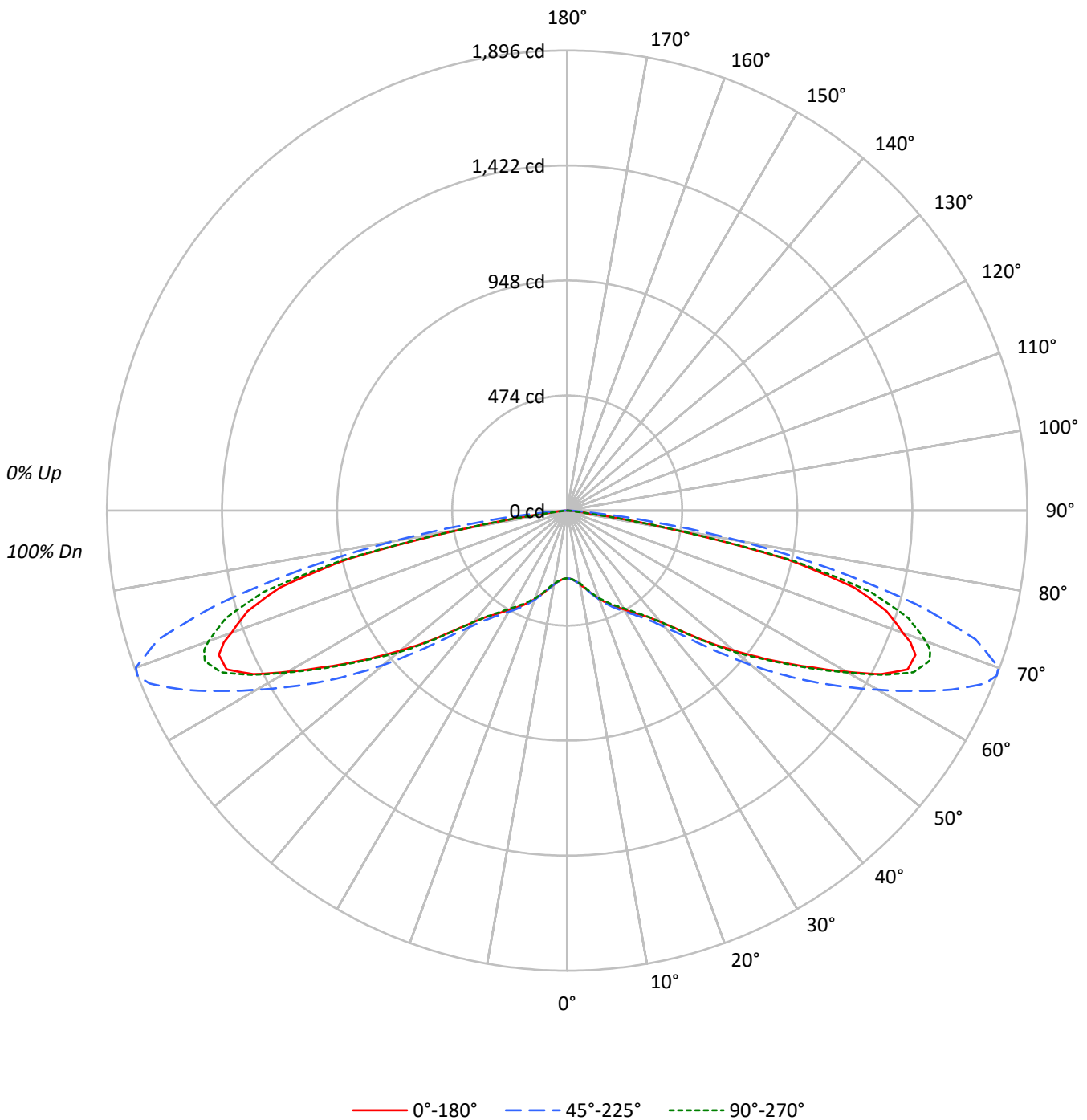
Lumens per Lamp: N/A
Luminaire Lumens: 5374.2 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 52.1
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°	9104	9104	9104
5°	9397	9397	9358
10°	10231	10211	10118
15°	11610	11667	11495
20°	13437	13555	13319
25°	15472	15713	15249
30°	17717	18120	17506
35°	20837	21395	20658
40°	25467	26642	25467
45°	33637	35819	33766
50°	45482	50196	46112
55°	62168	69850	62520
60°	86627	96314	86953
65°	119468	134842	121552
70°	140373	180351	149929
75°	154445	187489	163027
80°	78104	136653	80433
85°	10105	37051	7784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.0	0.5
10°-20°	99.0	1.8
20°-30°	200.4	3.7
30°-40°	335.9	6.3
40°-50°	592.6	11.0
50°-60°	1045.0	19.4
60°-70°	1595.4	29.7
70°-80°	1333.1	24.8
80°-90°	144.9	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°	327.4	6.1
0°-40°	663.3	12.3
0°-60°	2300.8	42.8
0°-90°	5374.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5374.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	279	279	279	279	279	
5°	287	288	287	286	286	28
15°	344	346	346	342	340	99
25°	430	432	437	429	424	200
35°	523	527	537	526	519	332
45°	729	746	776	753	732	573
55°	1093	1145	1228	1154	1099	991
65°	1548	1631	1747	1644	1575	1482
75°	1226	1294	1488	1377	1294	1180
85°	27	45	99	39	21	89
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°	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1
2.5°	281.3	281.9	281.3	281.3	281.3	281.3	281.3	280.8	280.8	280.8	281.3
5°	287.0	287.5	287.0	287.5	287.5	287.5	287.5	287.0	287.0	287.0	287.0
7.5°	296.0	296.0	296.0	296.5	296.0	296.0	296.5	296.0	296.0	296.0	296.0
10°	308.9	308.3	308.3	308.3	308.3	308.3	308.9	308.9	308.9	308.3	308.3
12.5°	324.7	324.1	324.7	324.7	325.2	325.2	325.2	325.2	325.2	325.2	324.7
15°	343.8	343.8	343.8	344.3	345.5	345.5	344.9	345.5	345.5	345.5	345.5
17.5°	365.2	366.3	365.2	365.7	366.3	365.7	366.9	367.4	368.0	367.4	365.7
20°	387.1	387.7	387.7	387.7	387.7	388.8	389.4	389.4	391.0	390.5	389.9
22.5°	407.9	409.1	409.1	409.6	409.6	411.3	411.3	411.3	412.4	413.6	412.4
25°	429.9	429.3	429.3	430.4	431.0	433.2	433.2	434.4	436.1	436.6	435.5
27.5°	449.6	449.0	449.0	450.7	451.3	454.1	454.1	456.3	457.4	458.0	456.9
30°	470.4	470.4	469.8	471.5	473.2	475.4	476.6	478.8	480.5	481.1	479.9
32.5°	495.1	494.0	494.6	495.7	496.8	499.1	500.8	503.6	505.8	506.4	505.3
35°	523.3	521.6	522.1	523.3	525.0	528.3	531.2	532.8	536.2	537.3	535.1
37.5°	554.2	554.8	554.2	557.0	559.8	563.8	567.2	569.4	572.8	574.5	572.8
40°	598.1	596.4	598.1	600.9	605.4	610.5	617.2	618.9	622.3	625.7	621.7
42.5°	654.9	653.8	657.8	660.0	665.1	670.7	679.1	683.6	688.7	690.9	687.6
45°	729.2	729.2	733.7	734.3	742.1	749.5	761.3	766.9	776.5	776.5	776.5
47.5°	811.4	814.7	817.5	823.2	828.8	842.3	854.1	866.5	875.5	876.6	874.9
50°	896.3	899.7	908.1	916.0	928.4	945.3	958.2	974.5	982.4	989.2	986.9
52.5°	990.3	990.8	1001.0	1011.1	1029.1	1047.7	1068.5	1085.4	1099.4	1105.6	1100.6
55°	1093.2	1094.4	1103.4	1114.1	1134.3	1155.7	1181.6	1199.0	1217.0	1228.3	1219.8
57.5°	1204.7	1205.2	1214.2	1227.2	1251.4	1272.7	1297.5	1322.3	1339.1	1349.3	1343.6
60°	1327.9	1330.7	1337.4	1353.8	1376.8	1399.3	1424.1	1446.0	1465.7	1476.4	1470.8
62.5°	1459.5	1462.4	1471.9	1484.9	1505.1	1529.9	1553.5	1581.6	1598.0	1609.8	1601.3
65°	1547.9	1552.9	1568.1	1585.6	1615.4	1647.5	1675.0	1713.3	1733.0	1747.1	1739.2
67.5°	1553.5	1556.3	1574.9	1601.3	1641.3	1689.7	1745.9	1805.6	1844.4	1863.0	1849.5
69°	1515.2	1519.2	1537.2	1567.0	1611.5	1667.7	1734.7	1809.0	1868.6	1896.2	1883.2
70°	1471.9	1480.4	1500.1	1532.7	1576.0	1635.1	1704.3	1783.6	1853.4	1891.1	1881.5
72.5°	1380.8	1383.0	1396.0	1421.8	1455.0	1504.0	1569.3	1644.1	1710.5	1764.5	1772.4
75°	1225.5	1232.8	1242.4	1259.8	1276.7	1312.1	1356.0	1407.2	1446.0	1487.7	1489.4
77.5°	926.1	948.1	955.4	959.3	966.7	994.8	1033.0	1077.5	1109.6	1116.3	1115.2
80°	415.8	445.1	451.8	483.9	503.6	550.3	608.8	676.9	722.5	727.5	715.1
82.5°	81.6	87.2	101.8	127.2	173.3	200.9	239.1	287.0	330.8	356.2	341.0
85°	27.0	28.7	33.2	36.6	42.2	47.8	58.0	72.0	89.5	99.0	88.3
87.5°	10.7	10.7	12.4	13.5	14.6	14.6	14.6	13.5	12.9	10.7	9.6
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°	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1
2.5°	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8
5°	287.0	286.4	286.4	285.8	285.8	285.8	285.8	285.8
7.5°	295.4	294.8	294.3	294.8	294.3	294.3	294.3	294.3
10°	308.3	307.2	306.7	306.1	306.1	306.1	305.5	305.5
12.5°	323.5	323.5	323.0	322.4	321.3	321.8	321.3	320.2
15°	344.3	343.2	342.7	342.1	341.0	341.0	341.0	340.4
17.5°	365.2	364.0	364.0	362.4	361.8	361.8	361.8	362.4
20°	388.2	386.5	385.4	384.3	383.2	383.7	382.6	383.7
22.5°	411.3	409.1	407.9	406.2	404.6	404.6	404.0	402.9
25°	433.8	431.0	429.9	428.2	425.9	425.9	424.8	423.7
27.5°	455.2	452.4	451.3	447.9	445.6	445.1	443.9	443.4
30°	478.8	475.4	473.8	470.4	467.0	466.4	464.8	464.8
32.5°	503.6	500.2	499.1	494.0	491.2	491.2	490.1	489.0
35°	534.5	529.5	528.3	523.3	519.3	519.3	518.2	518.8
37.5°	571.1	567.2	563.2	559.3	554.8	554.2	553.1	552.0
40°	620.1	615.6	611.0	605.4	601.5	600.4	598.7	598.1
42.5°	685.3	680.8	671.8	667.3	663.4	660.0	659.4	658.9
45°	768.6	763.0	756.8	748.3	743.3	736.0	734.8	732.0
47.5°	868.7	858.1	847.4	840.1	832.2	823.7	822.0	817.5
50°	975.1	966.7	948.6	936.8	924.5	916.0	910.4	908.7
52.5°	1089.3	1073.6	1055.6	1039.8	1021.8	1010.5	1000.4	997.6
55°	1208.6	1186.1	1163.6	1145.0	1127.0	1113.5	1103.9	1099.4
57.5°	1327.9	1303.1	1278.4	1258.1	1242.9	1225.5	1215.9	1213.7
60°	1452.2	1428.6	1403.3	1383.0	1364.5	1349.3	1343.6	1332.9
62.5°	1583.9	1559.1	1535.5	1515.8	1492.2	1481.5	1471.9	1465.7
65°	1713.3	1684.6	1654.8	1634.0	1610.3	1595.1	1583.3	1574.9
67.5°	1813.5	1770.1	1730.2	1695.3	1663.2	1639.6	1624.4	1616.5
69°	1841.6	1787.6	1736.4	1690.8	1653.1	1626.7	1609.8	1601.9
70°	1838.2	1778.6	1722.3	1672.2	1631.2	1603.0	1586.7	1572.1
72.5°	1734.1	1679.5	1617.1	1562.5	1525.4	1498.4	1482.0	1474.2
75°	1479.8	1443.2	1398.2	1356.0	1329.0	1313.2	1293.0	1293.6
77.5°	1077.5	1078.6	1048.2	1004.9	974.5	968.9	959.9	950.9
80°	668.4	615.0	580.1	533.4	499.1	469.3	456.3	428.2
82.5°	308.3	240.8	186.8	141.2	108.6	85.0	74.3	60.8
85°	68.6	52.3	43.3	34.9	29.8	27.6	22.5	20.8
87.5°	9.6	8.4	7.9	7.3	6.2	4.5	3.4	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)