

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: P147849

Luminaire Tested: **TLM-E02-LED-E1-5WQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147849
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-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

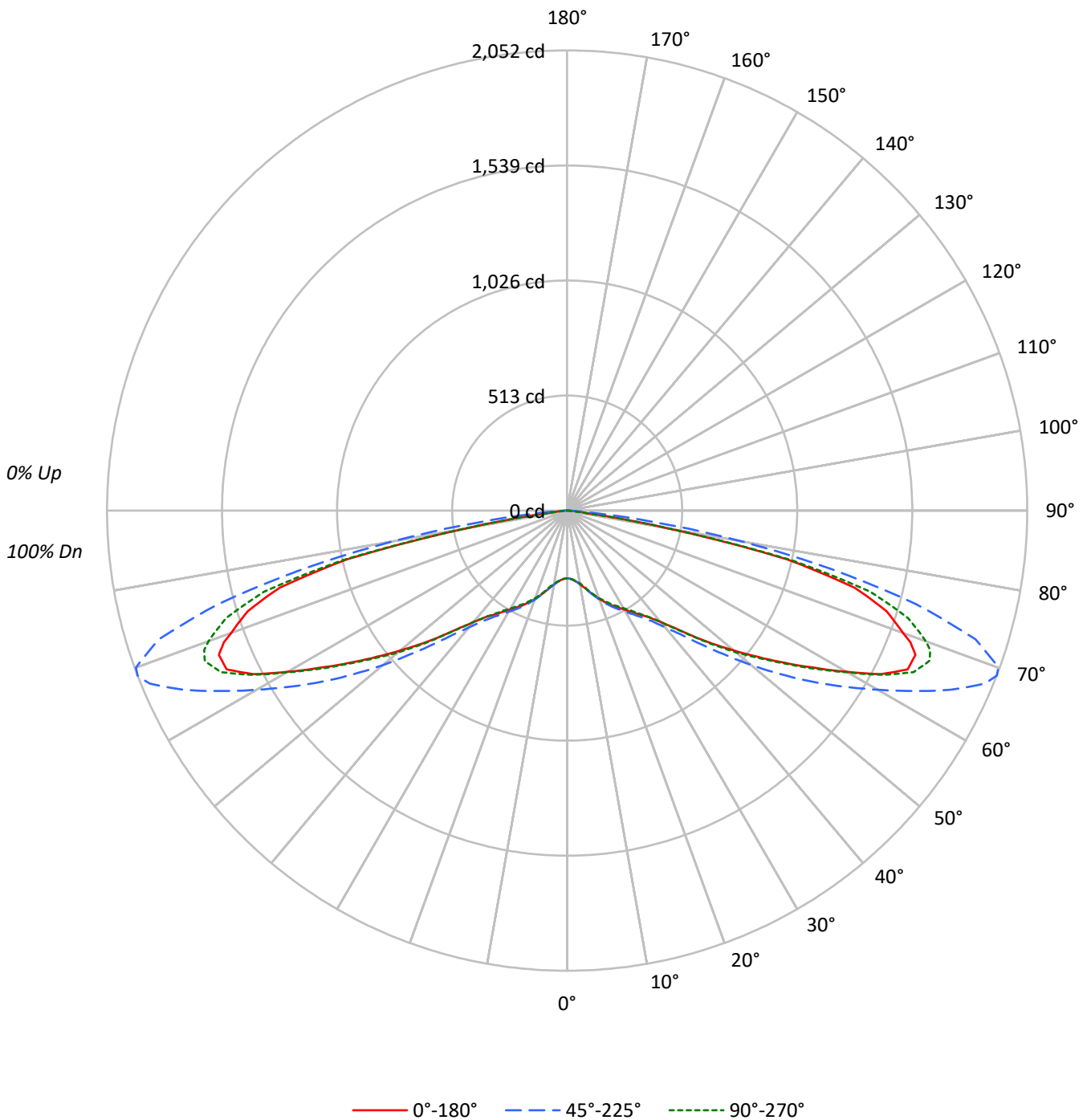
Lumens per Lamp: N/A
Luminaire Lumens: 5815.8 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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°	9851	9851	9851
5°	10167	10167	10127
10°	11072	11053	10950
15°	12562	12626	12440
20°	14541	14669	14416
25°	16743	17005	16501
30°	19171	19608	18945
35°	22550	23155	22354
40°	27562	28831	27562
45°	36400	38762	36543
50°	49222	54317	49902
55°	67280	75588	67661
60°	93744	104234	94103
65°	129285	145918	131539
70°	151912	195171	162250
75°	167136	202889	176424
80°	84528	147886	87045
85°	10928	40119	8421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.3	0.5
10°-20°	107.1	1.8
20°-30°	216.8	3.7
30°-40°	363.6	6.3
40°-50°	641.3	11.0
50°-60°	1130.9	19.4
60°-70°	1726.5	29.7
70°-80°	1442.7	24.8
80°-90°	156.8	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°	354.3	6.1
0°-40°	717.8	12.3
0°-60°	2489.9	42.8
0°-90°	5815.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5815.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	310	311	310	310	309	30
15°	372	374	374	370	368	107
25°	465	468	472	464	458	216
35°	566	570	582	569	561	360
45°	789	807	840	814	792	620
55°	1183	1239	1329	1249	1190	1072
65°	1675	1766	1891	1780	1704	1603
75°	1326	1401	1610	1490	1400	1277
85°	29	49	107	42	22	96
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°	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0
2.5°	304.5	305.1	304.5	304.5	304.5	304.5	304.5	303.8	303.8	303.8	304.5
5°	310.5	311.1	310.5	311.1	311.1	311.1	311.1	310.5	310.5	310.5	310.5
7.5°	320.3	320.3	320.3	320.9	320.3	320.3	320.9	320.3	320.3	320.3	320.3
10°	334.3	333.7	333.7	333.7	333.7	333.7	334.3	334.3	334.3	333.7	333.7
12.5°	351.3	350.7	351.3	351.3	351.9	351.9	351.9	351.9	351.9	351.9	351.3
15°	372.0	372.0	372.0	372.6	373.9	373.9	373.3	373.9	373.9	373.9	373.9
17.5°	395.2	396.4	395.2	395.8	396.4	395.8	397.0	397.6	398.2	397.6	395.8
20°	418.9	419.5	419.5	419.5	419.5	420.8	421.4	421.4	423.2	422.6	422.0
22.5°	441.5	442.7	442.7	443.3	443.3	445.1	445.1	445.1	446.3	447.5	446.3
25°	465.2	464.6	464.6	465.8	466.4	468.9	468.9	470.1	471.9	472.5	471.3
27.5°	486.5	485.9	485.9	487.7	488.3	491.4	491.4	493.8	495.0	495.6	494.4
30°	509.0	509.0	508.4	510.3	512.1	514.5	515.7	518.2	520.0	520.6	519.4
32.5°	535.8	534.6	535.2	536.4	537.7	540.1	541.9	545.0	547.4	548.0	546.8
35°	566.3	564.5	565.1	566.3	568.1	571.8	574.8	576.6	580.3	581.5	579.1
37.5°	599.8	600.4	599.8	602.8	605.9	610.1	613.8	616.2	619.9	621.7	619.9
40°	647.3	645.4	647.3	650.3	655.2	660.7	668.0	669.8	673.4	677.1	672.8
42.5°	708.8	707.5	711.8	714.2	719.7	725.8	734.9	739.8	745.3	747.7	744.1
45°	789.1	789.1	794.0	794.6	803.1	811.1	823.8	829.9	840.3	840.3	840.3
47.5°	878.0	881.7	884.7	890.8	896.9	911.5	924.3	937.7	947.4	948.7	946.8
50°	970.0	973.6	982.8	991.3	1004.7	1023.0	1037.0	1054.6	1063.1	1070.4	1068.0
52.5°	1071.7	1072.3	1083.2	1094.2	1113.7	1133.8	1156.3	1174.6	1189.8	1196.5	1191.0
55°	1183.1	1184.3	1194.1	1205.6	1227.5	1250.7	1278.7	1297.6	1317.1	1329.2	1320.1
57.5°	1303.7	1304.3	1314.0	1328.0	1354.2	1377.3	1404.1	1430.9	1449.2	1460.1	1454.1
60°	1437.0	1440.0	1447.4	1465.0	1490.0	1514.3	1541.1	1564.9	1586.2	1597.8	1591.7
62.5°	1579.5	1582.5	1592.9	1606.9	1628.8	1655.6	1681.2	1711.6	1729.3	1742.1	1732.9
65°	1675.1	1680.6	1697.0	1715.9	1748.2	1782.9	1812.7	1854.1	1875.4	1890.6	1882.1
67.5°	1681.2	1684.2	1704.3	1732.9	1776.2	1828.5	1889.4	1954.0	1996.0	2016.1	2001.5
69°	1639.8	1644.0	1663.5	1695.8	1743.9	1804.8	1877.2	1957.6	2022.2	2052.0	2038.0
70°	1592.9	1602.0	1623.3	1658.6	1705.5	1769.5	1844.4	1930.2	2005.7	2046.5	2036.2
72.5°	1494.2	1496.7	1510.7	1538.7	1574.6	1627.6	1698.2	1779.2	1851.1	1909.5	1918.0
75°	1326.2	1334.1	1344.5	1363.3	1381.6	1420.0	1467.4	1522.9	1564.9	1609.9	1611.8
77.5°	1002.2	1026.0	1033.9	1038.2	1046.1	1076.5	1117.9	1166.0	1200.8	1208.1	1206.8
80°	450.0	481.6	488.9	523.7	545.0	595.5	658.8	732.5	781.8	787.3	773.9
82.5°	88.3	94.4	110.2	137.6	187.5	217.4	258.8	310.5	358.0	385.4	369.0
85°	29.2	31.1	35.9	39.6	45.7	51.8	62.7	77.9	96.8	107.2	95.6
87.5°	11.6	11.6	13.4	14.6	15.8	15.8	15.8	14.6	14.0	11.6	10.4
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°	302.0	302.0	302.0	302.0	302.0	302.0	302.0	302.0
2.5°	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8
5°	310.5	309.9	309.9	309.3	309.3	309.3	309.3	309.3
7.5°	319.7	319.1	318.5	319.1	318.5	318.5	318.5	318.5
10°	333.7	332.5	331.9	331.2	331.2	331.2	330.6	330.6
12.5°	350.1	350.1	349.5	348.9	347.7	348.3	347.7	346.5
15°	372.6	371.4	370.8	370.2	369.0	369.0	369.0	368.4
17.5°	395.2	394.0	394.0	392.1	391.5	391.5	391.5	392.1
20°	420.1	418.3	417.1	415.9	414.7	415.3	414.1	415.3
22.5°	445.1	442.7	441.5	439.6	437.8	437.8	437.2	436.0
25°	469.5	466.4	465.2	463.4	460.9	460.9	459.7	458.5
27.5°	492.6	489.6	488.3	484.7	482.2	481.6	480.4	479.8
30°	518.2	514.5	512.7	509.0	505.4	504.8	503.0	503.0
32.5°	545.0	541.3	540.1	534.6	531.6	531.6	530.4	529.1
35°	578.5	573.0	571.8	566.3	562.0	562.0	560.8	561.4
37.5°	618.0	613.8	609.5	605.2	600.4	599.8	598.5	597.3
40°	671.0	666.1	661.3	655.2	650.9	649.7	647.9	647.3
42.5°	741.6	736.8	727.0	722.2	717.9	714.2	713.6	713.0
45°	831.8	825.7	819.0	809.8	804.4	796.4	795.2	792.2
47.5°	940.1	928.6	917.0	909.1	900.6	891.4	889.6	884.7
50°	1055.2	1046.1	1026.6	1013.8	1000.4	991.3	985.2	983.4
52.5°	1178.8	1161.8	1142.3	1125.2	1105.8	1093.6	1082.6	1079.6
55°	1307.9	1283.6	1259.2	1239.1	1219.6	1205.0	1194.7	1189.8
57.5°	1437.0	1410.2	1383.4	1361.5	1345.1	1326.2	1315.8	1313.4
60°	1571.6	1546.0	1518.6	1496.7	1476.6	1460.1	1454.1	1442.5
62.5°	1714.1	1687.3	1661.7	1640.4	1614.8	1603.2	1592.9	1586.2
65°	1854.1	1823.0	1790.8	1768.2	1742.7	1726.2	1713.4	1704.3
67.5°	1962.5	1915.6	1872.4	1834.6	1799.9	1774.3	1757.9	1749.4
69°	1992.9	1934.5	1879.1	1829.7	1788.9	1760.3	1742.1	1733.5
70°	1989.3	1924.7	1863.8	1809.7	1765.2	1734.8	1717.1	1701.3
72.5°	1876.6	1817.6	1750.0	1690.9	1650.7	1621.5	1603.8	1595.3
75°	1601.4	1561.8	1513.1	1467.4	1438.2	1421.2	1399.3	1399.9
77.5°	1166.0	1167.3	1134.4	1087.5	1054.6	1048.5	1038.8	1029.0
80°	723.4	665.5	627.8	577.2	540.1	507.8	493.8	463.4
82.5°	333.7	260.6	202.2	152.8	117.5	91.9	80.4	65.8
85°	74.3	56.6	46.9	37.8	32.3	29.8	24.4	22.5
87.5°	10.4	9.1	8.5	7.9	6.7	4.9	3.7	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)