

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: P147344

Luminaire Tested: **TLM-F03-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147344  
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-F03-LED-E1-5MQ-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (21) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7292.1 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

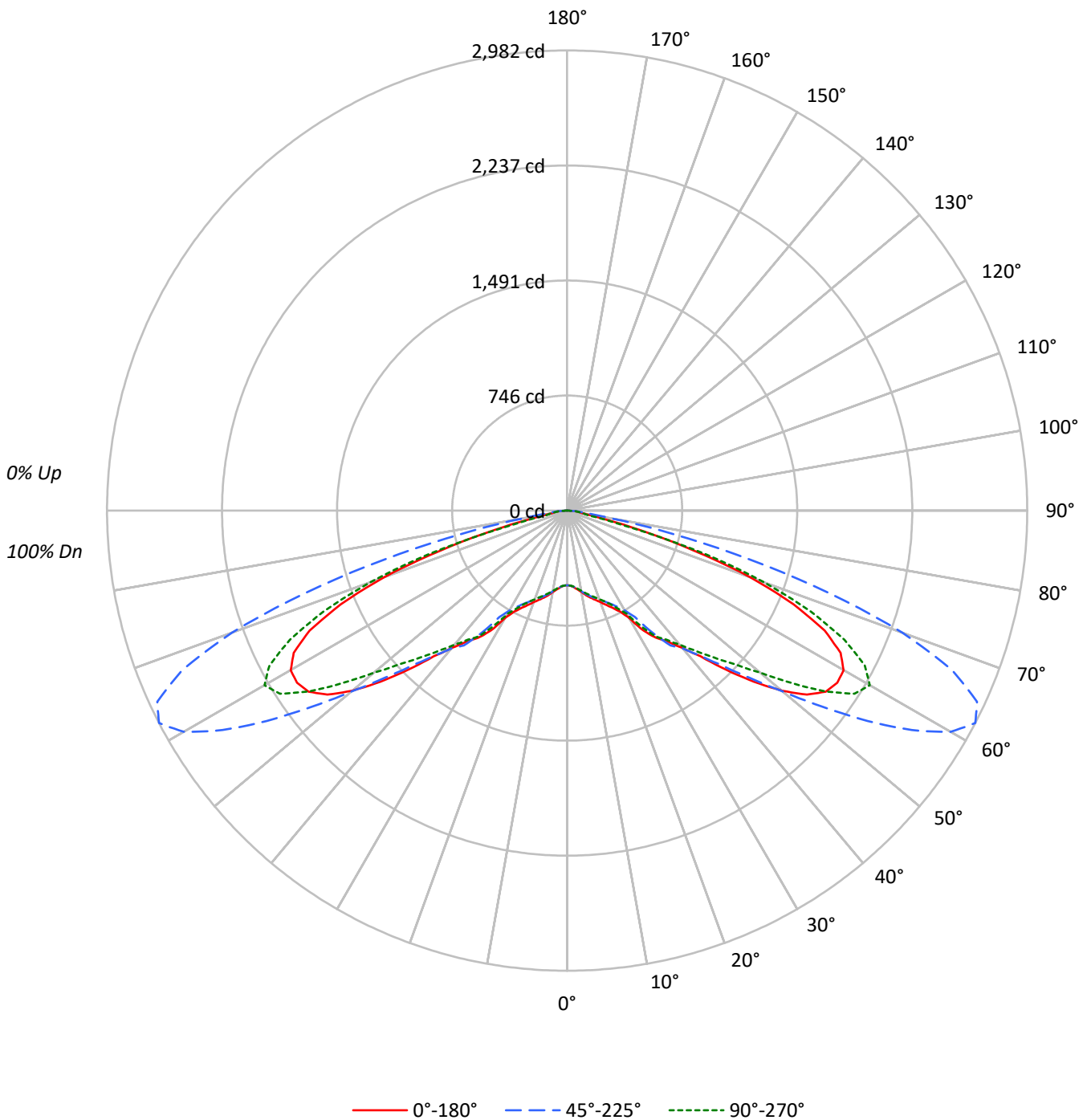
Input Watts (W): 78.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	10422	10422	10422
5°	10770	10714	10688
10°	11719	11595	11538
15°	13007	12762	12637
20°	14458	14112	13991
25°	16504	15832	15957
30°	19931	18594	19230
35°	26465	25492	26136
40°	32633	32725	31891
45°	44456	43189	41022
50°	60794	61112	54772
55°	76792	89215	76690
60°	89065	123492	97487
65°	93794	149293	101012
70°	79560	145531	85521
75°	40358	102158	35059
80°	12806	35481	12906
85°	13882	18427	14153



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	0.7
10°-20°	164.0	2.2
20°-30°	317.1	4.3
30°-40°	613.9	8.4
40°-50°	1108.4	15.2
50°-60°	1927.4	26.4
60°-70°	2188.1	30.0
70°-80°	848.3	11.6
80°-90°	76.5	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°	529.5	7.3
0°-40°	1143.4	15.7
0°-60°	4179.2	57.3
0°-90°	7292.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7292.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	484	484	484	484	484	
5°	498	498	496	495	495	49
15°	584	579	573	569	567	167
25°	695	681	666	667	672	327
35°	1007	988	970	987	994	629
45°	1460	1427	1419	1363	1347	1144
55°	2046	2144	2377	2116	2043	1801
65°	1841	2114	2931	2275	1983	1755
75°	485	679	1228	642	422	588
85°	56	80	75	80	57	55
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°	484.1	484.1	484.1	484.1	484.1	484.1	484.1	484.1	484.1	484.1	484.1
2.5°	487.1	488.6	488.2	487.4	487.4	487.5	487.1	486.0	485.6	486.3	487.0
5°	498.4	498.4	498.4	498.4	497.6	497.6	496.9	496.2	496.5	495.8	495.4
7.5°	515.8	514.6	514.6	514.2	514.2	513.4	512.3	510.8	511.2	510.8	510.4
10°	536.1	536.4	535.3	536.5	534.6	534.2	532.7	532.0	531.6	530.4	530.4
12.5°	560.6	559.4	559.5	558.7	558.0	557.2	555.0	554.6	553.0	552.3	551.2
15°	583.6	583.2	581.7	580.2	579.8	579.1	576.4	574.9	574.5	572.6	571.2
17.5°	606.6	605.8	604.0	603.2	601.7	600.6	598.3	596.0	594.9	594.2	592.3
20°	631.1	630.3	628.4	627.0	625.0	623.6	620.2	618.3	617.1	616.0	614.5
22.5°	661.6	660.2	657.1	654.4	650.3	648.8	644.2	641.6	639.8	638.3	637.5
25°	694.8	695.2	691.0	687.6	682.8	678.6	673.0	669.9	668.0	666.5	666.2
27.5°	736.3	736.6	732.8	728.0	720.4	716.0	708.4	704.6	703.4	702.0	701.6
30°	801.8	798.5	792.1	784.2	777.3	767.6	756.6	752.8	749.1	748.0	748.0
32.5°	922.5	920.6	915.4	895.8	886.7	866.3	847.1	836.2	823.8	817.7	814.0
35°	1007.0	1006.2	1002.0	995.3	989.6	985.4	974.2	972.2	970.0	970.0	973.0
37.5°	1069.2	1064.6	1063.9	1065.0	1063.5	1064.2	1073.3	1085.8	1096.3	1101.6	1100.8
40°	1161.2	1154.8	1158.6	1155.8	1152.4	1151.8	1154.8	1159.6	1164.6	1164.5	1163.4
42.5°	1281.4	1284.4	1285.9	1275.0	1267.8	1265.9	1273.2	1271.6	1276.5	1274.6	1269.7
45°	1460.2	1458.2	1455.6	1442.4	1431.1	1422.0	1423.9	1421.3	1421.6	1418.6	1414.9
47.5°	1640.3	1646.7	1635.8	1629.4	1616.6	1610.1	1615.4	1610.9	1619.6	1603.8	1596.2
50°	1815.2	1819.8	1816.0	1807.0	1807.0	1816.0	1822.4	1830.7	1842.8	1824.7	1797.5
52.5°	1958.5	1962.3	1968.0	1975.4	1994.0	2013.2	2040.3	2069.4	2092.3	2089.0	2058.0
55°	2046.0	2050.4	2059.9	2085.9	2119.1	2169.6	2231.0	2298.6	2351.3	2377.0	2354.4
57.5°	2075.4	2078.8	2104.4	2135.7	2187.3	2262.4	2365.3	2481.8	2583.2	2647.6	2637.5
60°	2068.6	2068.6	2094.6	2137.6	2210.0	2309.5	2455.0	2616.4	2771.6	2868.2	2853.9
62.5°	1997.3	2001.1	2038.4	2090.0	2177.6	2296.7	2470.1	2676.3	2862.2	2982.0	2970.4
65°	1841.3	1843.9	1884.2	1945.7	2043.4	2184.3	2374.0	2602.4	2815.4	2930.8	2908.9
67.5°	1589.1	1591.6	1624.5	1693.8	1797.2	1944.6	2149.2	2400.7	2609.2	2700.5	2634.8
70°	1264.0	1271.6	1292.8	1366.2	1444.6	1589.1	1777.6	2029.0	2225.8	2312.1	2239.7
72.5°	861.4	880.6	906.3	971.6	1046.5	1166.4	1316.4	1528.4	1686.3	1786.2	1721.8
75°	485.2	512.3	520.2	569.6	631.4	726.1	835.8	987.8	1147.2	1228.2	1150.6
77.5°	209.6	231.8	241.7	264.7	312.9	352.5	419.2	521.8	645.0	702.0	608.8
80°	103.3	108.6	112.7	119.9	133.5	146.3	178.0	222.8	273.3	286.2	227.8
82.5°	79.9	83.7	90.8	96.6	99.9	103.3	106.3	112.4	117.2	119.8	113.1
85°	56.2	61.1	69.0	75.4	79.2	81.8	84.4	86.4	81.8	74.6	78.4
87.5°	14.7	19.2	26.8	29.0	32.8	34.7	34.0	35.0	31.6	23.0	25.6
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°	484.1	484.1	484.1	484.1	484.1	484.1	484.1	484.1
2.5°	486.7	486.3	486.7	486.7	486.7	486.3	486.3	486.3
5°	495.4	495.4	495.8	495.0	495.0	495.4	495.0	494.6
7.5°	510.1	509.7	509.7	509.3	509.7	509.4	509.3	508.9
10°	529.7	528.9	529.3	528.2	528.2	527.8	527.8	527.8
12.5°	550.8	549.6	550.0	548.9	547.0	547.4	547.8	547.4
15°	571.2	570.0	568.9	568.2	567.0	567.4	567.4	567.0
17.5°	591.9	589.6	589.2	588.1	587.8	587.7	587.8	588.1
20°	613.4	611.8	611.5	610.4	610.0	611.2	611.5	610.7
22.5°	636.4	635.6	636.4	635.6	636.8	637.5	637.9	637.1
25°	665.4	664.6	665.8	668.4	670.0	670.6	672.6	671.8
27.5°	702.7	702.0	704.6	708.4	710.6	714.4	716.3	717.0
30°	751.0	754.4	755.9	763.4	764.9	770.9	770.9	773.6
32.5°	821.1	827.5	838.8	850.5	866.7	878.4	878.4	884.4
35°	975.0	977.6	986.2	988.1	991.5	995.2	991.5	994.5
37.5°	1093.0	1081.2	1072.9	1061.2	1054.0	1054.1	1054.8	1054.1
40°	1153.2	1148.7	1144.9	1135.1	1133.6	1133.2	1133.2	1134.8
42.5°	1261.1	1250.1	1244.1	1235.8	1233.2	1232.4	1232.1	1232.8
45°	1401.3	1383.6	1367.4	1359.1	1351.9	1345.1	1347.4	1347.4
47.5°	1564.6	1537.0	1510.6	1496.3	1483.9	1478.2	1474.4	1473.3
50°	1763.2	1724.8	1690.8	1664.0	1646.0	1645.6	1647.5	1635.4
52.5°	2006.8	1946.0	1903.8	1867.6	1850.7	1848.8	1842.8	1836.0
55°	2276.7	2204.6	2135.0	2096.1	2073.9	2061.8	2054.6	2043.3
57.5°	2554.9	2458.0	2357.8	2295.6	2256.4	2229.2	2214.8	2208.4
60°	2769.4	2637.1	2504.8	2404.9	2339.6	2299.3	2274.4	2264.2
62.5°	2853.8	2674.4	2504.8	2373.6	2279.3	2223.5	2190.0	2175.3
65°	2753.2	2540.6	2347.6	2202.8	2097.6	2035.4	1998.8	1983.0
67.5°	2472.0	2284.2	2074.2	1930.2	1822.0	1760.6	1721.0	1709.3
70°	2072.4	1880.5	1679.9	1551.4	1454.9	1404.7	1363.6	1358.7
72.5°	1557.4	1391.8	1219.9	1113.6	1036.0	953.0	931.9	942.5
75°	998.3	843.4	690.2	594.6	523.6	444.5	414.0	421.5
77.5°	472.8	366.0	264.2	204.4	171.5	146.6	140.2	136.5
80°	175.3	142.2	125.6	119.2	114.6	110.4	107.4	104.1
82.5°	113.4	110.8	107.4	106.3	102.9	97.6	87.8	83.7
85°	84.8	84.8	80.3	80.6	78.1	71.2	62.2	57.3
87.5°	24.9	22.2	20.3	18.8	18.5	16.6	12.1	10.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)