

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: P147864

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147864  
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-F03-LED-E1-5WQ-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (21) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

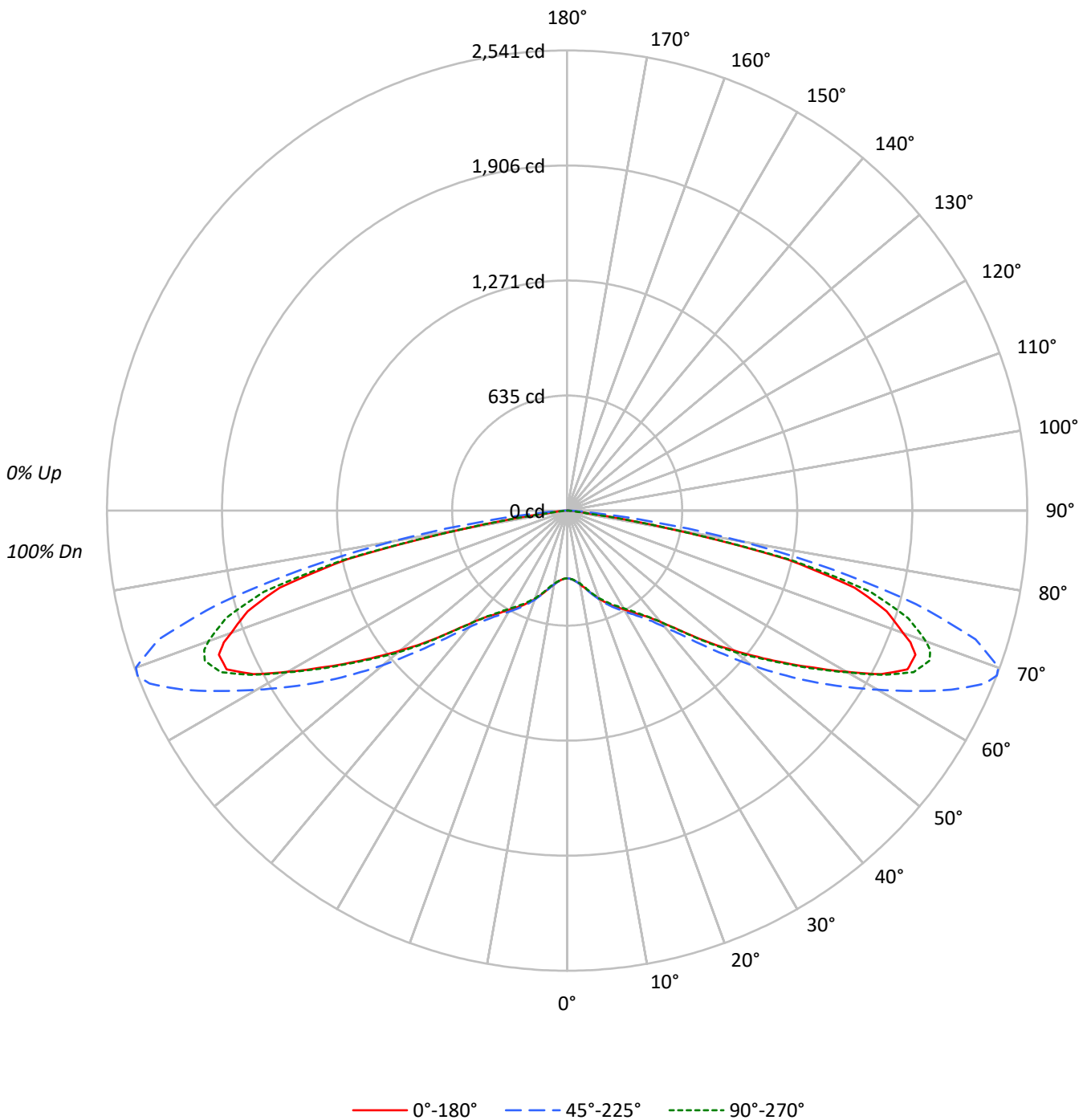
Lumens per Lamp: N/A  
Luminaire Lumens: 7201.7 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

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	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°	8051	8051	8051
5°	8309	8309	8277
10°	9048	9033	8949
15°	10268	10319	10167
20°	11883	11989	11780
25°	13684	13898	13487
30°	15668	16026	15482
35°	18428	18925	18270
40°	22524	23561	22524
45°	29751	31678	29863
50°	40226	44393	40782
55°	54985	61779	55297
60°	76613	85186	76906
65°	105658	119254	107502
70°	124149	159511	132602
75°	136594	165822	144179
80°	69078	120862	71136
85°	8942	32777	6891



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.6	0.5
10°-20°	132.6	1.8
20°-30°	268.5	3.7
30°-40°	450.2	6.3
40°-50°	794.1	11.0
50°-60°	1400.3	19.4
60°-70°	2137.9	29.7
70°-80°	1786.4	24.8
80°-90°	194.1	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°	438.7	6.1
0°-40°	888.8	12.3
0°-60°	3083.2	42.8
0°-90°	7201.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7201.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	384	385	384	383	383	38
15°	461	463	463	459	456	133
25°	576	579	585	575	568	268
35°	701	706	720	705	695	445
45°	977	999	1040	1008	981	768
55°	1465	1534	1646	1547	1473	1327
65°	2074	2186	2341	2204	2110	1985
75°	1642	1735	1994	1845	1733	1581
85°	36	60	133	52	28	119
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°	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0
2.5°	377.0	377.8	377.0	377.0	377.0	377.0	377.0	376.2	376.2	376.2	377.0
5°	384.5	385.3	384.5	385.3	385.3	385.3	385.3	384.5	384.5	384.5	384.5
7.5°	396.6	396.6	396.6	397.4	396.6	396.6	397.4	396.6	396.6	396.6	396.6
10°	413.9	413.2	413.2	413.2	413.2	413.2	413.9	413.9	413.9	413.2	413.2
12.5°	435.1	434.3	435.1	435.1	435.8	435.8	435.8	435.8	435.8	435.8	435.1
15°	460.7	460.7	460.7	461.4	463.0	463.0	462.2	463.0	463.0	463.0	463.0
17.5°	489.3	490.8	489.3	490.1	490.8	490.1	491.6	492.4	493.1	492.4	490.1
20°	518.7	519.5	519.5	519.5	519.5	521.0	521.8	521.8	524.0	523.3	522.5
22.5°	546.6	548.2	548.2	548.9	548.9	551.2	551.2	551.2	552.7	554.2	552.7
25°	576.1	575.3	575.3	576.8	577.6	580.6	580.6	582.1	584.3	585.1	583.6
27.5°	602.4	601.7	601.7	603.9	604.7	608.5	608.5	611.5	613.0	613.8	612.2
30°	630.3	630.3	629.6	631.8	634.1	637.1	638.6	641.6	643.9	644.7	643.2
32.5°	663.5	662.0	662.8	664.3	665.8	668.8	671.1	674.8	677.8	678.6	677.1
35°	701.2	699.0	699.7	701.2	703.5	708.0	711.8	714.0	718.6	720.1	717.0
37.5°	742.7	743.4	742.7	746.5	750.2	755.5	760.0	763.0	767.6	769.8	767.6
40°	801.5	799.2	801.5	805.3	811.3	818.1	827.1	829.4	833.9	838.4	833.2
42.5°	877.6	876.1	881.4	884.4	891.2	898.8	910.1	916.1	922.9	925.9	921.4
45°	977.2	977.2	983.2	984.0	994.5	1004.3	1020.2	1027.7	1040.5	1040.5	1040.5
47.5°	1087.3	1091.8	1095.6	1103.1	1110.6	1128.7	1144.6	1161.1	1173.2	1174.7	1172.5
50°	1201.1	1205.6	1216.9	1227.5	1244.1	1266.7	1284.1	1305.9	1316.5	1325.5	1322.5
52.5°	1327.0	1327.8	1341.4	1354.9	1379.1	1403.9	1431.8	1454.5	1473.3	1481.6	1474.8
55°	1465.0	1466.5	1478.6	1492.9	1520.1	1548.7	1583.4	1606.8	1630.9	1646.0	1634.7
57.5°	1614.3	1615.1	1627.1	1644.5	1676.9	1705.5	1738.7	1771.9	1794.5	1808.1	1800.5
60°	1779.4	1783.2	1792.2	1814.1	1845.0	1875.2	1908.4	1937.8	1964.2	1978.5	1970.9
62.5°	1955.9	1959.6	1972.4	1989.8	2016.9	2050.1	2081.8	2119.5	2141.3	2157.2	2145.9
65°	2074.2	2081.0	2101.4	2124.8	2164.7	2207.7	2244.6	2295.9	2322.3	2341.1	2330.6
67.5°	2081.8	2085.5	2110.4	2145.9	2199.4	2264.2	2339.6	2419.6	2471.6	2496.5	2478.4
69°	2030.5	2035.8	2059.9	2099.9	2159.4	2234.8	2324.6	2424.1	2504.0	2541.0	2523.6
70°	1972.4	1983.8	2010.1	2053.9	2111.9	2191.1	2283.8	2390.2	2483.7	2534.2	2521.4
72.5°	1850.3	1853.3	1870.7	1905.3	1949.8	2015.4	2102.9	2203.2	2292.1	2364.5	2375.1
75°	1642.2	1652.0	1664.8	1688.2	1710.8	1758.3	1817.1	1885.7	1937.8	1993.6	1995.8
77.5°	1241.1	1270.5	1280.3	1285.6	1295.4	1333.1	1384.3	1443.9	1486.9	1495.9	1494.4
80°	557.2	596.4	605.5	648.4	674.8	737.4	815.8	907.1	968.1	974.9	958.3
82.5°	109.3	116.9	136.5	170.4	232.2	269.2	320.4	384.5	443.3	477.3	456.9
85°	36.2	38.5	44.5	49.0	56.5	64.1	77.7	96.5	119.9	132.7	118.4
87.5°	14.3	14.3	16.6	18.1	19.6	19.6	19.6	18.1	17.3	14.3	12.8
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°	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0
2.5°	376.2	376.2	376.2	376.2	376.2	376.2	376.2	376.2
5°	384.5	383.8	383.8	383.0	383.0	383.0	383.0	383.0
7.5°	395.8	395.1	394.3	395.1	394.3	394.3	394.3	394.3
10°	413.2	411.7	410.9	410.2	410.2	410.2	409.4	409.4
12.5°	433.5	433.5	432.8	432.0	430.5	431.3	430.5	429.0
15°	461.4	459.9	459.2	458.4	456.9	456.9	456.9	456.2
17.5°	489.3	487.8	487.8	485.6	484.8	484.8	484.8	485.6
20°	520.3	518.0	516.5	515.0	513.5	514.2	512.7	514.2
22.5°	551.2	548.2	546.6	544.4	542.1	542.1	541.4	539.9
25°	581.3	577.6	576.1	573.8	570.8	570.8	569.3	567.8
27.5°	610.0	606.2	604.7	600.2	597.2	596.4	594.9	594.1
30°	641.6	637.1	634.9	630.3	625.8	625.1	622.8	622.8
32.5°	674.8	670.3	668.8	662.0	658.2	658.2	656.7	655.2
35°	716.3	709.5	708.0	701.2	695.9	695.9	694.4	695.2
37.5°	765.3	760.0	754.7	749.5	743.4	742.7	741.2	739.7
40°	830.9	824.9	818.8	811.3	806.0	804.5	802.2	801.5
42.5°	918.4	912.3	900.3	894.2	889.0	884.4	883.7	882.9
45°	1030.0	1022.4	1014.1	1002.8	996.0	986.2	984.7	980.9
47.5°	1164.2	1149.8	1135.5	1125.7	1115.2	1103.8	1101.6	1095.6
50°	1306.7	1295.4	1271.2	1255.4	1238.8	1227.5	1220.0	1217.7
52.5°	1459.7	1438.6	1414.5	1393.4	1369.3	1354.2	1340.6	1336.8
55°	1619.6	1589.4	1559.3	1534.4	1510.2	1492.2	1479.3	1473.3
57.5°	1779.4	1746.2	1713.1	1685.9	1665.6	1642.2	1629.4	1626.4
60°	1946.1	1914.4	1880.5	1853.3	1828.4	1808.1	1800.5	1786.2
62.5°	2122.5	2089.3	2057.6	2031.3	1999.6	1985.3	1972.4	1964.2
65°	2295.9	2257.5	2217.5	2189.6	2157.9	2137.6	2121.7	2110.4
67.5°	2430.1	2372.1	2318.5	2271.8	2228.8	2197.1	2176.8	2166.2
69°	2467.8	2395.4	2326.8	2265.8	2215.2	2179.8	2157.2	2146.6
70°	2463.3	2383.4	2308.0	2240.9	2185.8	2148.1	2126.3	2106.7
72.5°	2323.8	2250.7	2167.0	2093.8	2044.1	2007.9	1986.0	1975.5
75°	1983.0	1934.0	1873.7	1817.1	1780.9	1759.8	1732.7	1733.4
77.5°	1443.9	1445.4	1404.7	1346.6	1305.9	1298.4	1286.3	1274.2
80°	895.7	824.1	777.4	714.8	668.8	628.8	611.5	573.8
82.5°	413.2	322.7	250.3	189.3	145.5	113.9	99.5	81.4
85°	92.0	70.1	58.1	46.7	40.0	36.9	30.2	27.9
87.5°	12.8	11.3	10.6	9.8	8.3	6.0	4.5	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)