

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: P147865

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147865
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

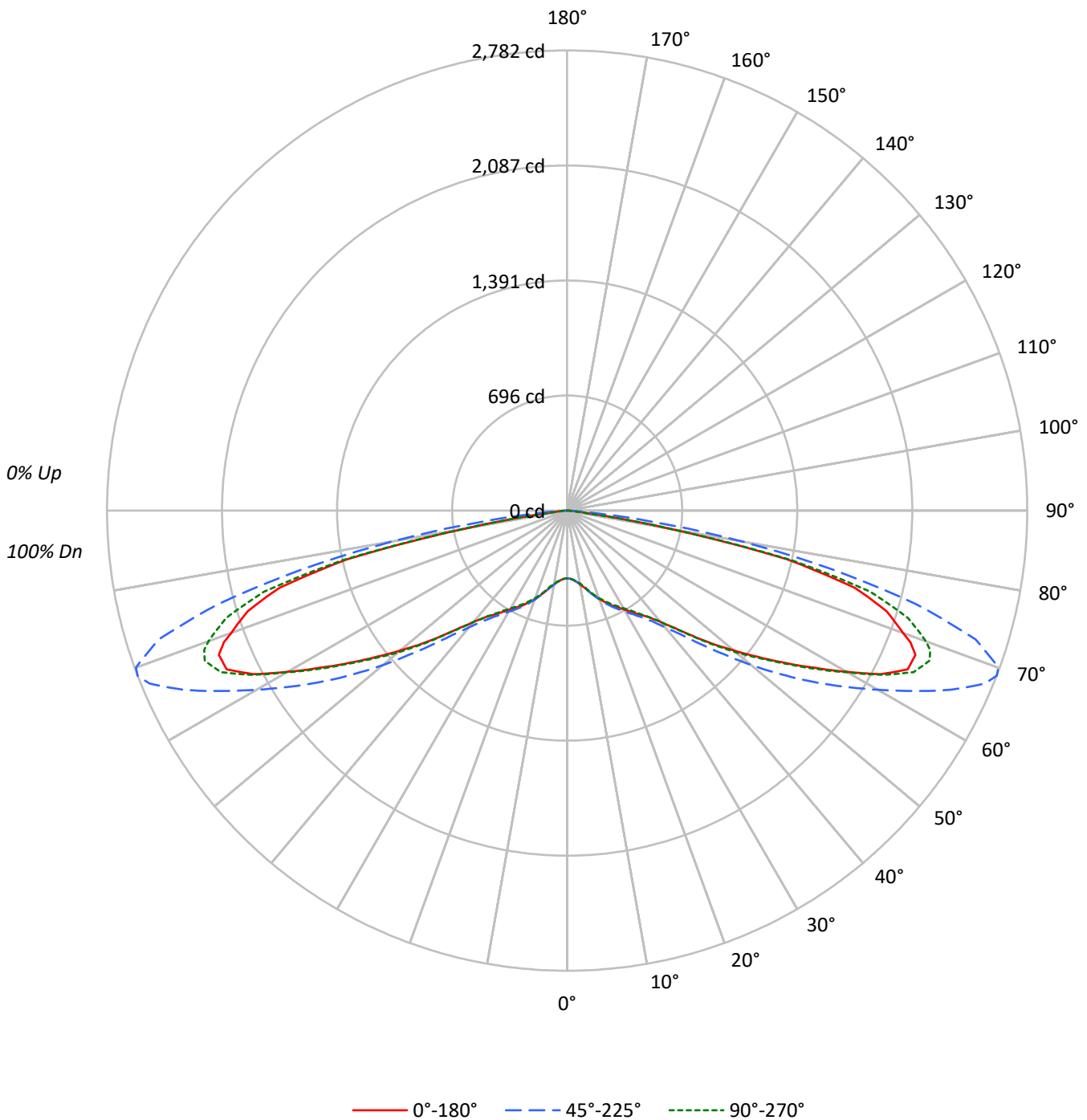
Lumens per Lamp: N/A
Luminaire Lumens: 7884.9 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

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°	8816	8816	8816
5°	9098	9098	9063
10°	9907	9889	9800
15°	11242	11297	11130
20°	13013	13125	12898
25°	14981	15216	14765
30°	17155	17545	16951
35°	20176	20720	20002
40°	24660	25798	24660
45°	32573	34683	32698
50°	44044	48606	44651
55°	60202	67638	60544
60°	83881	93267	84204
65°	115683	130572	117700
70°	135932	174642	145178
75°	149553	181551	157862
80°	75636	132330	77880
85°	9781	35890	7534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	0.5
10°-20°	145.2	1.8
20°-30°	294.0	3.7
30°-40°	492.9	6.3
40°-50°	869.4	11.0
50°-60°	1533.2	19.4
60°-70°	2340.7	29.7
70°-80°	1955.9	24.8
80°-90°	212.5	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°	480.3	6.1
0°-40°	973.2	12.3
0°-60°	3375.8	42.8
0°-90°	7884.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7884.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	421	422	421	420	419	41
15°	504	507	507	502	499	145
25°	631	634	641	629	622	293
35°	768	773	788	771	761	488
45°	1070	1094	1139	1104	1074	841
55°	1604	1680	1802	1694	1613	1453
65°	2271	2394	2563	2413	2311	2174
75°	1798	1899	2183	2020	1898	1731
85°	40	66	145	57	30	130
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°	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5
2.5°	412.8	413.6	412.8	412.8	412.8	412.8	412.8	411.9	411.9	411.9	412.8
5°	421.0	421.8	421.0	421.8	421.8	421.8	421.8	421.0	421.0	421.0	421.0
7.5°	434.2	434.2	434.2	435.1	434.2	434.2	435.1	434.2	434.2	434.2	434.2
10°	453.2	452.4	452.4	452.4	452.4	452.4	453.2	453.2	453.2	452.4	452.4
12.5°	476.3	475.5	476.3	476.3	477.2	477.2	477.2	477.2	477.2	477.2	476.3
15°	504.4	504.4	504.4	505.2	506.9	506.9	506.0	506.9	506.9	506.9	506.9
17.5°	535.8	537.4	535.8	536.6	537.4	536.6	538.2	539.1	539.9	539.1	536.6
20°	568.0	568.8	568.8	568.8	568.8	570.4	571.3	571.3	573.7	572.9	572.1
22.5°	598.5	600.2	600.2	601.0	601.0	603.5	603.5	603.5	605.1	606.8	605.1
25°	630.7	629.9	629.9	631.5	632.4	635.7	635.7	637.3	639.8	640.6	639.0
27.5°	659.6	658.8	658.8	661.2	662.1	666.2	666.2	669.5	671.2	672.0	670.3
30°	690.1	690.1	689.3	691.8	694.3	697.6	699.2	702.5	705.0	705.8	704.2
32.5°	726.5	724.8	725.6	727.3	728.9	732.2	734.7	738.8	742.1	743.0	741.3
35°	767.7	765.3	766.1	767.7	770.2	775.2	779.3	781.8	786.7	788.4	785.1
37.5°	813.1	814.0	813.1	817.3	821.4	827.2	832.1	835.4	840.4	842.9	840.4
40°	877.5	875.1	877.5	881.7	888.3	895.7	905.6	908.1	913.0	918.0	912.2
42.5°	960.9	959.3	965.0	968.3	975.8	984.0	996.4	1003.0	1010.4	1013.7	1008.8
45°	1069.9	1069.9	1076.5	1077.3	1088.9	1099.6	1116.9	1125.2	1139.2	1139.2	1139.2
47.5°	1190.4	1195.4	1199.5	1207.7	1216.0	1235.8	1253.1	1271.3	1284.5	1286.2	1283.7
50°	1315.1	1320.0	1332.4	1344.0	1362.1	1386.9	1405.9	1429.8	1441.4	1451.3	1448.0
52.5°	1452.9	1453.7	1468.6	1483.5	1509.9	1537.1	1567.7	1592.4	1613.1	1622.2	1614.7
55°	1604.0	1605.6	1618.9	1634.5	1664.3	1695.6	1733.6	1759.2	1785.6	1802.1	1789.7
57.5°	1767.4	1768.3	1781.5	1800.5	1836.0	1867.3	1903.7	1940.0	1964.7	1979.6	1971.4
60°	1948.2	1952.4	1962.3	1986.2	2020.1	2053.1	2089.4	2121.6	2150.5	2166.2	2157.9
62.5°	2141.4	2145.5	2159.6	2178.6	2208.3	2244.6	2279.3	2320.6	2344.5	2361.8	2349.4
65°	2271.0	2278.4	2300.7	2326.3	2370.1	2417.1	2457.6	2513.7	2542.6	2563.3	2551.7
67.5°	2279.3	2283.4	2310.6	2349.4	2408.1	2479.1	2561.6	2649.1	2706.1	2733.3	2713.5
69°	2223.1	2228.9	2255.3	2299.1	2364.3	2446.9	2545.1	2654.1	2741.6	2782.0	2763.0
70°	2159.6	2172.0	2200.8	2248.7	2312.3	2399.0	2500.5	2616.9	2719.3	2774.6	2760.6
72.5°	2025.8	2029.1	2048.1	2086.1	2134.8	2206.6	2302.4	2412.2	2509.6	2588.8	2600.4
75°	1798.0	1808.7	1822.8	1848.4	1873.1	1925.1	1989.5	2064.6	2121.6	2182.7	2185.2
77.5°	1358.8	1391.0	1401.7	1407.5	1418.3	1459.5	1515.7	1580.9	1627.9	1637.8	1636.2
80°	610.1	653.0	662.9	710.0	738.8	807.4	893.2	993.1	1060.0	1067.4	1049.2
82.5°	119.7	128.0	149.4	186.6	254.3	294.7	350.8	421.0	485.4	522.6	500.3
85°	39.6	42.1	48.7	53.7	61.9	70.2	85.0	105.7	131.3	145.3	129.6
87.5°	15.7	15.7	18.2	19.8	21.5	21.5	21.5	19.8	19.0	15.7	14.0
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°	409.5	409.5	409.5	409.5	409.5	409.5	409.5	409.5
2.5°	411.9	411.9	411.9	411.9	411.9	411.9	411.9	411.9
5°	421.0	420.2	420.2	419.4	419.4	419.4	419.4	419.4
7.5°	433.4	432.6	431.7	432.6	431.7	431.7	431.7	431.7
10°	452.4	450.7	449.9	449.1	449.1	449.1	448.3	448.3
12.5°	474.7	474.7	473.9	473.0	471.4	472.2	471.4	469.7
15°	505.2	503.6	502.7	501.9	500.3	500.3	500.3	499.4
17.5°	535.8	534.1	534.1	531.6	530.8	530.8	530.8	531.6
20°	569.6	567.1	565.5	563.8	562.2	563.0	561.4	563.0
22.5°	603.5	600.2	598.5	596.0	593.6	593.6	592.7	591.1
25°	636.5	632.4	630.7	628.2	624.9	624.9	623.3	621.6
27.5°	667.8	663.7	662.1	657.1	653.8	653.0	651.3	650.5
30°	702.5	697.6	695.1	690.1	685.2	684.4	681.9	681.9
32.5°	738.8	733.9	732.2	724.8	720.7	720.7	719.0	717.4
35°	784.2	776.8	775.2	767.7	762.0	762.0	760.3	761.1
37.5°	837.9	832.1	826.4	820.6	814.0	813.1	811.5	809.8
40°	909.7	903.1	896.5	888.3	882.5	880.8	878.4	877.5
42.5°	1005.5	998.9	985.7	979.1	973.3	968.3	967.5	966.7
45°	1127.7	1119.4	1110.3	1097.9	1090.5	1079.8	1078.1	1074.0
47.5°	1274.6	1258.9	1243.2	1232.5	1221.0	1208.6	1206.1	1199.5
50°	1430.6	1418.3	1391.8	1374.5	1356.3	1344.0	1335.7	1333.2
52.5°	1598.2	1575.1	1548.7	1525.6	1499.2	1482.6	1467.8	1463.7
55°	1773.2	1740.2	1707.2	1679.9	1653.5	1633.7	1619.7	1613.1
57.5°	1948.2	1911.9	1875.6	1845.9	1823.6	1798.0	1784.0	1780.7
60°	2130.7	2096.0	2058.9	2029.1	2001.9	1979.6	1971.4	1955.7
62.5°	2323.9	2287.5	2252.9	2224.0	2189.3	2173.6	2159.6	2150.5
65°	2513.7	2471.6	2427.9	2397.3	2362.7	2340.4	2323.0	2310.6
67.5°	2660.7	2597.1	2538.5	2487.3	2440.3	2405.6	2383.3	2371.7
69°	2701.9	2622.7	2547.6	2480.7	2425.4	2386.6	2361.8	2350.3
70°	2697.0	2609.5	2526.9	2453.5	2393.2	2351.9	2328.0	2306.5
72.5°	2544.3	2464.2	2372.6	2292.5	2238.0	2198.4	2174.4	2162.9
75°	2171.1	2117.5	2051.4	1989.5	1949.9	1926.8	1897.1	1897.9
77.5°	1580.9	1582.5	1538.0	1474.4	1429.8	1421.6	1408.3	1395.1
80°	980.7	902.3	851.1	782.6	732.2	688.5	669.5	628.2
82.5°	452.4	353.3	274.1	207.2	159.3	124.7	109.0	89.2
85°	100.7	76.8	63.6	51.2	43.8	40.5	33.0	30.5
87.5°	14.0	12.4	11.6	10.7	9.1	6.6	5.0	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)