

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: P148394

Luminaire Tested: **TLM-F04-LED-E1-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148394
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33676)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F04-LED-E1-5XQ-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

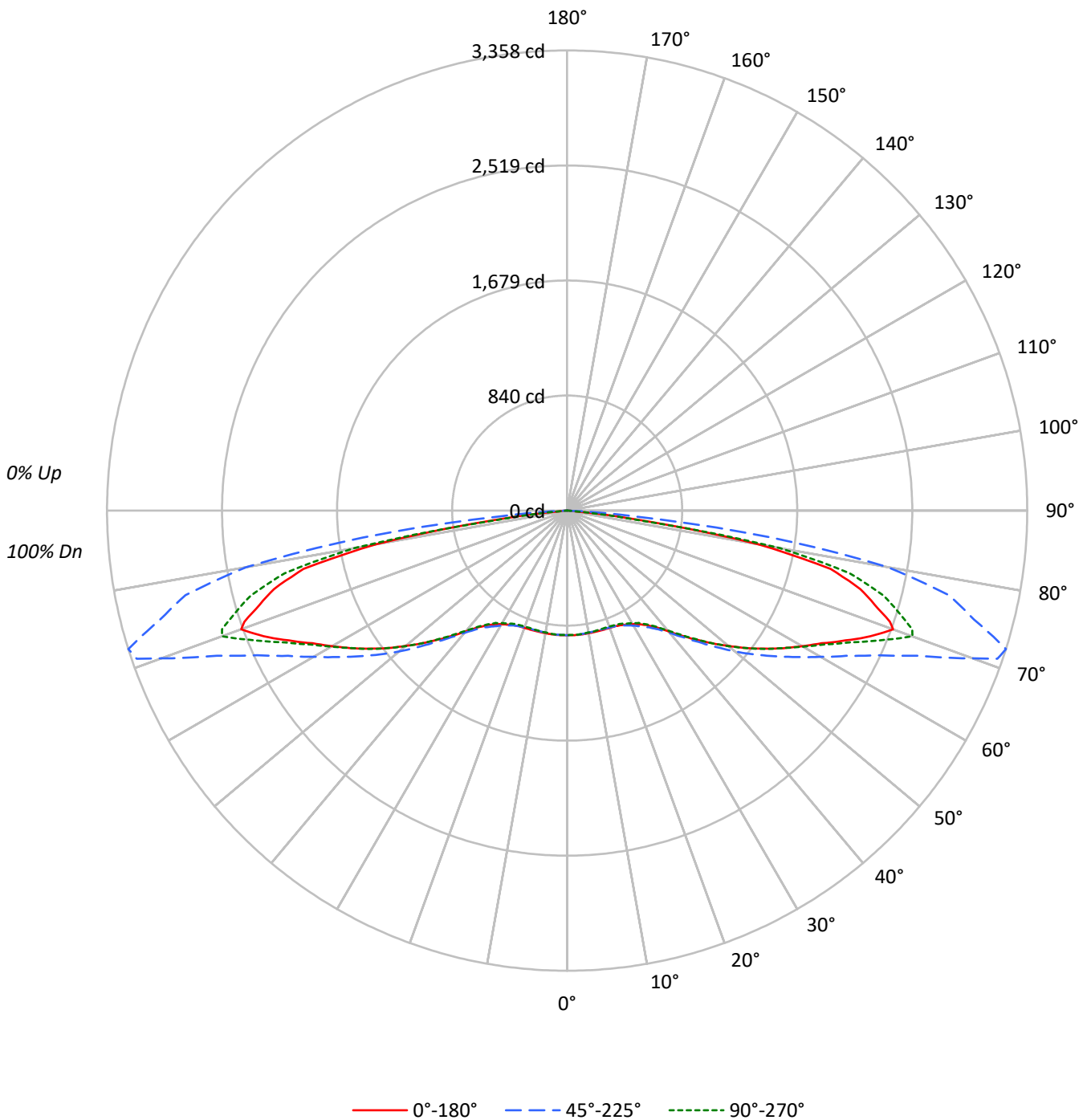
Lumens per Lamp: N/A
Luminaire Lumens: 9591.9 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 102.2
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



TEST NUMBER: P148394
CATALOG NUMBER: TLM-F04-LED-E1-5XQ-7030

Luminous Intensity Polar Plot





TEST NUMBER: P148394

CATALOG NUMBER: TLM-F04-LED-E1-5XQ-7030

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	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73	70
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52	49
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38	36
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30	27
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24	21
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19	17
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16	14
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14	12
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12	10
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14600	14600	14600
5°	14680	14656	14648
10°	14819	14760	14736
15°	15115	15024	14982
20°	15572	15507	15401
25°	16351	16395	16156
30°	17755	17983	17586
35°	20013	20397	19883
40°	24130	24409	23929
45°	30263	30795	30152
50°	38380	39950	38470
55°	49207	51882	49308
60°	63571	68568	63812
65°	85243	94891	86483
70°	118906	148151	125990
75°	137565	190848	148266
80°	130913	219822	145234
85°	10654	89143	6949



TEST NUMBER: P148394

CATALOG NUMBER: TLM-F04-LED-E1-5XQ-7030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	0.9
10°-20°	256.2	2.7
20°-30°	429.0	4.5
30°-40°	654.1	6.8
40°-50°	1044.4	10.9
50°-60°	1605.8	16.7
60°-70°	2338.1	24.4
70°-80°	2633.9	27.5
80°-90°	543.7	5.7
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°	771.9	8.0
0°-40°	1425.9	14.9
0°-60°	4076.2	42.5
0°-90°	9591.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9591.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	910	910	909	908	908	87
15°	909	906	903	900	901	258
25°	922	924	925	916	911	430
35°	1020	1028	1040	1022	1014	652
45°	1332	1332	1355	1334	1327	1039
55°	1757	1762	1852	1770	1760	1581
65°	2242	2251	2496	2284	2275	2235
75°	2216	2357	3075	2551	2389	2257
85°	58	152	484	122	38	360
90°	0	0	0	0	0	



TEST NUMBER: P148394

CATALOG NUMBER: TLM-F04-LED-E1-5XQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	910.4	910.8	910.6	910.1	910.3	910.0	909.6	909.3	907.6	908.6	910.1
5°	910.3	909.8	909.6	909.3	909.3	910.1	909.3	908.6	908.3	908.8	908.1
7.5°	909.8	908.8	908.3	908.1	908.3	908.6	907.8	906.8	907.6	906.8	905.8
10°	908.4	907.6	907.8	906.8	907.0	906.8	905.8	905.0	905.5	904.8	903.5
12.5°	908.8	907.6	907.3	906.8	906.6	906.3	905.0	903.8	904.0	903.5	902.3
15°	908.8	908.1	907.8	906.8	906.5	906.0	904.5	904.0	904.0	903.3	901.8
17.5°	909.4	908.8	908.8	907.6	907.0	906.8	905.0	904.3	905.0	903.5	902.5
20°	910.8	910.4	910.6	909.8	908.8	908.8	907.6	907.0	907.3	907.0	904.3
22.5°	913.8	913.8	914.4	914.1	913.8	914.1	913.1	913.1	913.4	913.4	911.1
25°	922.4	922.1	922.6	922.6	922.8	924.6	923.9	923.6	924.9	924.9	922.6
27.5°	938.5	938.0	938.5	939.0	940.2	942.5	942.0	942.8	944.8	944.2	942.2
30°	957.1	956.6	957.8	959.3	960.4	963.8	962.4	966.1	967.9	969.4	967.9
32.5°	984.2	984.2	986.5	987.5	989.8	993.3	993.8	996.8	999.0	1001.6	999.8
35°	1020.4	1019.9	1021.6	1023.4	1026.2	1029.4	1030.7	1034.8	1038.2	1040.0	1036.7
37.5°	1075.7	1072.9	1076.2	1077.2	1079.5	1080.2	1083.8	1088.8	1092.5	1092.0	1089.8
40°	1150.6	1150.1	1148.9	1147.3	1150.8	1152.1	1152.1	1158.9	1164.9	1163.9	1163.7
42.5°	1238.0	1235.8	1234.3	1234.3	1236.3	1236.8	1244.6	1249.6	1253.9	1254.9	1253.9
45°	1332.0	1329.8	1330.3	1329.3	1330.0	1333.3	1337.9	1347.1	1355.2	1355.4	1351.2
47.5°	1433.1	1426.1	1431.6	1423.8	1428.6	1431.1	1442.4	1455.9	1470.0	1472.6	1468.8
50°	1535.6	1534.9	1534.4	1532.8	1535.2	1540.7	1554.5	1575.8	1589.4	1598.4	1592.4
52.5°	1647.7	1644.0	1642.2	1639.7	1642.0	1652.8	1672.1	1690.7	1715.1	1725.4	1717.1
55°	1756.8	1755.6	1749.0	1748.8	1753.5	1770.4	1791.4	1814.4	1840.8	1852.3	1849.3
57.5°	1868.9	1861.6	1859.6	1856.6	1866.1	1882.0	1907.9	1949.1	1976.5	1989.5	1982.0
60°	1978.5	1972.9	1968.7	1967.7	1974.2	1996.3	2033.5	2083.0	2117.0	2134.0	2122.0
62.5°	2096.1	2092.6	2087.6	2081.8	2095.6	2124.0	2170.2	2225.0	2275.1	2296.1	2277.8
65°	2242.4	2235.1	2229.6	2222.2	2233.6	2269.2	2327.3	2404.5	2471.6	2496.2	2483.2
67.5°	2396.7	2389.9	2390.4	2385.9	2406.0	2455.5	2530.4	2635.2	2725.2	2767.2	2742.5
70°	2531.4	2535.2	2536.2	2554.5	2589.2	2664.6	2789.3	2953.4	3089.9	3154.0	3127.6
71°	2491.7	2500.0	2512.8	2531.9	2591.7	2681.0	2851.1	3049.9	3212.8	3321.4	3284.9
72.5°	2379.1	2384.1	2390.6	2419.8	2487.4	2605.6	2780.7	3007.9	3217.3	3357.8	3315.6
75°	2216.2	2221.0	2223.3	2243.6	2305.2	2408.2	2568.6	2770.2	2954.9	3074.6	3062.7
77.5°	1970.4	1971.2	1988.8	2020.2	2089.3	2207.2	2376.1	2585.2	2758.8	2851.9	2792.8
80°	1415.0	1405.4	1423.5	1464.0	1549.5	1684.7	1857.6	2096.3	2289.1	2376.0	2284.6
82.5°	538.4	567.5	613.5	680.4	709.2	859.6	1020.9	1161.2	1323.5	1505.0	1459.5
85°	57.8	65.1	81.7	101.3	127.9	177.0	244.5	333.8	411.4	483.6	429.3
87.5°	21.6	22.1	24.6	28.4	28.9	30.2	32.2	37.4	34.9	30.2	24.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P148394

CATALOG NUMBER: TLM-F04-LED-E1-5XQ-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	908.8	908.8	908.8	908.8	908.8	908.8	908.8	908.8
2.5°	908.8	909.0	908.8	909.0	909.0	908.0	908.3	907.8
5°	908.6	907.8	908.0	908.3	908.0	908.6	907.8	908.3
7.5°	907.3	905.8	906.3	906.3	905.8	906.6	906.0	905.8
10°	904.8	902.8	903.8	903.3	903.0	903.3	903.3	903.3
12.5°	902.5	901.2	901.5	901.2	901.0	901.8	901.5	901.8
15°	902.0	900.0	899.8	899.2	899.5	900.0	900.0	900.8
17.5°	901.5	899.0	898.8	898.2	898.5	899.5	899.8	899.2
20°	903.0	901.0	900.5	900.0	899.8	901.0	900.8	900.8
22.5°	910.1	907.6	907.3	905.3	904.5	905.3	904.8	904.8
25°	921.4	918.4	917.4	914.6	912.6	912.6	911.8	911.4
27.5°	941.8	937.2	936.2	934.0	931.2	931.7	930.2	930.0
30°	965.4	961.4	957.8	954.6	951.3	950.0	948.2	948.0
32.5°	996.3	991.8	987.5	983.5	978.9	977.2	974.1	972.6
35°	1034.2	1028.2	1023.2	1020.4	1015.9	1013.6	1011.6	1013.8
37.5°	1087.3	1080.0	1077.4	1074.2	1071.2	1067.6	1068.4	1067.6
40°	1160.6	1154.1	1151.6	1145.8	1145.1	1141.0	1143.6	1141.0
42.5°	1251.4	1239.3	1237.5	1233.0	1231.5	1229.3	1230.3	1228.5
45°	1350.1	1339.4	1337.3	1330.1	1330.3	1325.0	1327.0	1327.1
47.5°	1461.2	1449.9	1440.6	1435.4	1433.3	1430.1	1431.8	1431.6
50°	1575.8	1560.5	1550.2	1539.9	1535.4	1536.6	1533.2	1539.2
52.5°	1699.0	1676.1	1661.6	1651.8	1643.2	1645.0	1645.5	1647.2
55°	1826.4	1797.2	1776.2	1763.4	1755.5	1756.0	1758.3	1760.4
57.5°	1954.6	1918.2	1889.5	1870.4	1865.4	1867.6	1867.6	1867.4
60°	2087.5	2043.8	2006.9	1985.2	1980.8	1979.5	1989.2	1986.0
62.5°	2230.3	2177.8	2139.6	2111.9	2105.4	2109.9	2118.7	2116.7
65°	2419.6	2346.9	2297.7	2270.3	2259.2	2263.7	2275.6	2275.0
67.5°	2663.6	2562.1	2497.0	2461.8	2453.8	2459.3	2465.8	2472.1
70°	3028.6	2883.5	2790.6	2714.4	2681.7	2675.4	2682.0	2682.2
71°	3157.0	2990.4	2842.3	2749.3	2695.8	2673.2	2674.9	2663.6
72.5°	3151.7	2946.4	2773.2	2675.9	2601.5	2583.4	2574.6	2561.1
75°	2939.3	2754.4	2604.0	2498.0	2426.4	2405.0	2389.4	2388.6
77.5°	2665.6	2529.2	2363.5	2251.2	2164.0	2128.5	2112.7	2112.2
80°	2142.8	1938.5	1817.4	1749.8	1644.4	1614.0	1581.9	1569.8
82.5°	1295.8	1012.6	823.4	731.6	680.9	560.7	503.2	476.0
85°	301.8	214.4	147.8	97.0	69.9	55.6	42.7	37.7
87.5°	20.4	16.1	14.3	11.6	8.8	8.6	5.3	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)