

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: P147354

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147354  
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-F04-LED-E1-5MQ-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (28) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9722.8 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
CIE Type: Direct

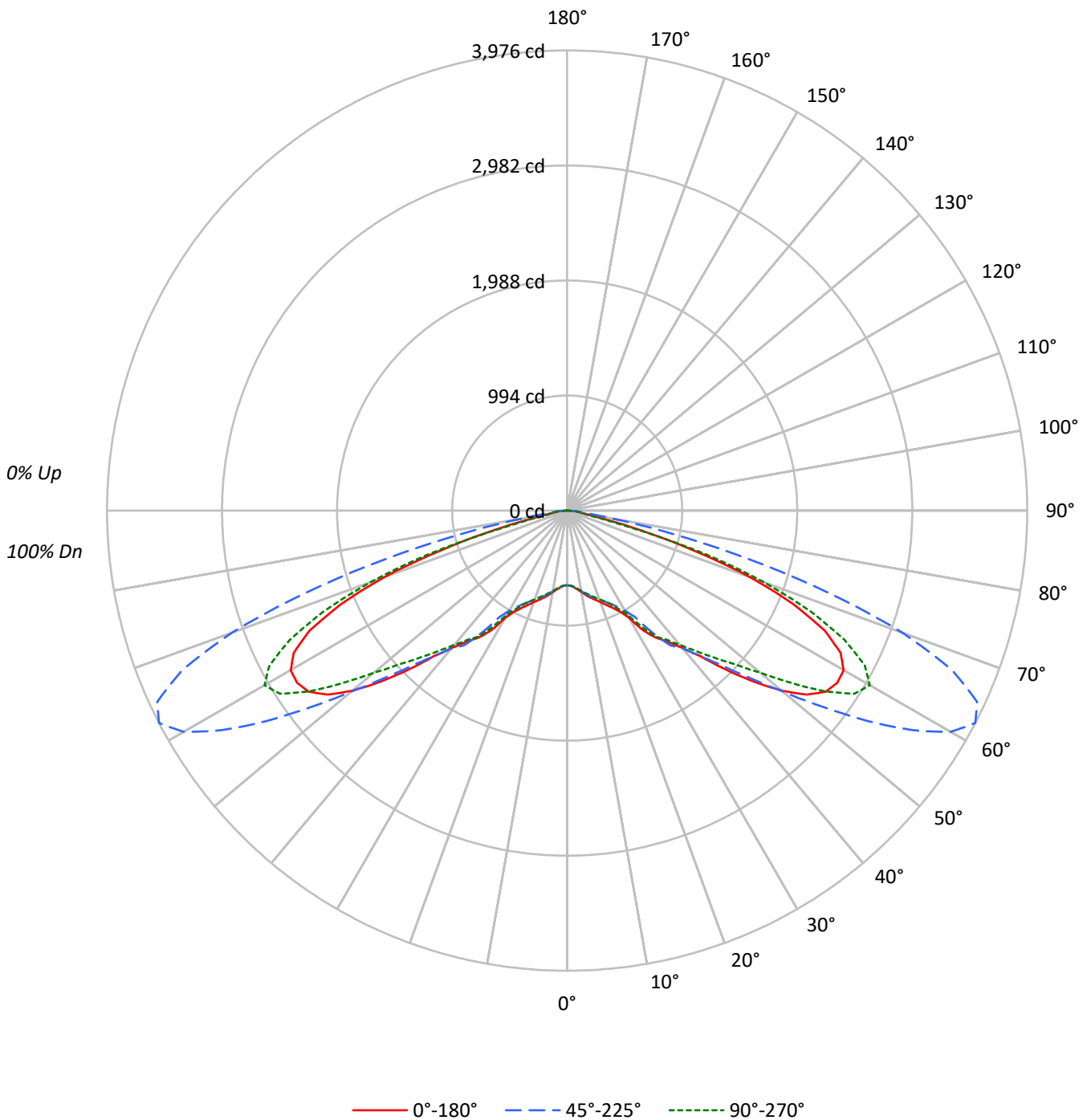
Input Watts (W): 102.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P147354

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

### Luminous Intensity Polar Plot





TEST NUMBER: P147354

CATALOG NUMBER: TLM-F04-LED-E1-5MQ-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	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°	10369	10369	10369
5°	10716	10660	10636
10°	11661	11537	11480
15°	12942	12700	12574
20°	14385	14043	13922
25°	16422	15753	15878
30°	19835	18499	19135
35°	26332	25367	26006
40°	32469	32565	31731
45°	44232	42975	40817
50°	60494	60807	54498
55°	76410	88770	76309
60°	88624	122876	97004
65°	93325	148549	100510
70°	79172	144807	85095
75°	40155	101650	34885
80°	12740	35296	12832
85°	13806	18359	14083



TEST NUMBER: P147354

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	0.7
10°-20°	218.6	2.2
20°-30°	422.7	4.3
30°-40°	818.5	8.4
40°-50°	1477.9	15.2
50°-60°	2569.8	26.4
60°-70°	2917.4	30.0
70°-80°	1131.1	11.6
80°-90°	102.0	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°	706.1	7.3
0°-40°	1524.6	15.7
0°-60°	5572.3	57.3
0°-90°	9722.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9722.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	664	664	661	660	660	65
15°	778	773	764	758	756	222
25°	926	908	889	889	896	436
35°	1343	1317	1293	1316	1326	839
45°	1947	1902	1892	1818	1796	1525
55°	2728	2859	3169	2821	2724	2402
65°	2455	2818	3908	3034	2644	2340
75°	647	905	1638	857	562	784
85°	75	107	100	107	76	73
90°	0	0	0	0	0	



TEST NUMBER: P147354

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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4
2.5°	649.4	651.4	651.0	650.0	650.0	649.9	649.4	647.9	647.4	648.4	649.4
5°	664.5	664.5	664.5	664.5	663.5	663.5	662.5	661.5	662.0	661.0	660.5
7.5°	687.6	686.2	686.2	685.6	685.6	684.6	683.1	681.1	681.6	681.1	680.6
10°	714.8	715.3	713.8	715.3	712.8	712.2	710.2	709.2	708.8	707.2	707.2
12.5°	747.4	746.0	746.0	745.0	744.0	743.0	740.0	739.4	737.4	736.4	734.9
15°	778.1	777.6	775.6	773.6	773.1	772.0	768.6	766.6	766.1	763.6	761.6
17.5°	808.8	807.8	805.2	804.2	802.2	800.8	797.7	794.7	793.2	792.2	789.7
20°	841.4	840.4	838.0	836.0	833.4	831.4	826.9	824.4	822.8	821.4	819.4
22.5°	882.2	880.2	876.2	872.6	867.1	865.0	859.0	855.5	853.0	851.0	850.0
25°	926.4	926.9	921.4	916.8	910.4	904.8	897.2	893.2	890.8	888.7	888.2
27.5°	981.7	982.2	977.2	970.6	960.6	954.6	944.5	939.4	938.0	936.0	935.4
30°	1069.2	1064.6	1056.1	1045.6	1036.5	1023.4	1008.8	1003.8	998.8	997.2	997.2
32.5°	1230.0	1227.5	1220.5	1194.4	1182.2	1155.2	1129.4	1115.0	1098.3	1090.3	1085.2
35°	1342.6	1341.6	1336.0	1327.0	1319.5	1314.0	1298.8	1296.4	1293.4	1293.4	1297.4
37.5°	1425.6	1419.5	1418.5	1420.0	1418.0	1419.0	1431.1	1447.7	1461.8	1468.8	1467.8
40°	1548.2	1539.6	1544.7	1541.2	1536.6	1535.6	1539.6	1546.2	1552.8	1552.8	1551.2
42.5°	1708.6	1712.6	1714.6	1700.0	1690.4	1687.9	1697.5	1695.5	1702.0	1699.5	1693.0
45°	1946.8	1944.3	1940.8	1923.2	1908.1	1896.0	1898.6	1895.0	1895.6	1891.5	1886.5
47.5°	2187.1	2195.6	2181.0	2172.5	2155.4	2146.9	2153.9	2147.8	2159.4	2138.3	2128.2
50°	2420.4	2426.4	2421.4	2409.2	2409.2	2421.4	2429.9	2441.0	2457.0	2432.9	2396.7
52.5°	2611.3	2616.4	2623.9	2634.0	2658.6	2684.2	2720.4	2759.1	2789.8	2785.2	2744.0
55°	2728.0	2734.0	2746.6	2781.2	2825.4	2892.9	2974.8	3064.8	3135.1	3169.3	3139.2
57.5°	2767.2	2771.6	2805.9	2847.6	2916.4	3016.4	3153.7	3309.0	3444.2	3530.2	3516.6
60°	2758.2	2758.1	2792.8	2850.1	2946.6	3079.3	3273.3	3488.4	3695.6	3824.2	3805.2
62.5°	2663.1	2668.1	2717.9	2786.8	2903.4	3062.2	3293.4	3568.4	3816.2	3976.0	3960.5
65°	2455.0	2458.5	2512.3	2594.2	2724.4	2912.5	3165.2	3469.9	3753.9	3907.7	3878.6
67.5°	2118.7	2122.2	2166.0	2258.4	2396.2	2592.8	2865.6	3201.0	3478.9	3600.6	3513.2
70°	1685.5	1695.5	1723.6	1821.6	1926.2	2118.8	2370.0	2705.4	2967.7	3082.8	2986.3
72.5°	1148.6	1174.2	1208.4	1295.4	1395.4	1555.2	1755.3	2037.8	2248.4	2381.6	2295.7
75°	646.9	683.2	693.7	759.6	842.0	968.1	1114.4	1317.0	1529.6	1637.6	1534.2
77.5°	279.5	309.2	322.2	352.9	417.2	470.0	559.0	695.7	860.0	936.0	811.8
80°	137.7	144.8	150.3	159.8	178.0	195.0	237.2	297.1	364.4	381.5	303.6
82.5°	106.5	111.6	121.2	128.6	133.2	137.8	141.8	149.8	156.4	159.8	150.8
85°	74.9	81.4	92.0	100.5	105.6	109.1	112.6	115.1	109.1	99.6	104.6
87.5°	19.6	25.6	35.7	38.7	43.8	46.2	45.2	46.8	42.2	30.6	34.2
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: P147354

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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	645.4	645.4	645.4	645.4	645.4	645.4	645.4	645.4
2.5°	649.0	648.4	649.0	649.0	649.0	648.4	648.4	648.4
5°	660.5	660.5	661.0	660.0	660.0	660.5	660.0	659.5
7.5°	680.2	679.6	679.6	679.1	679.6	679.0	679.1	678.6
10°	706.2	705.2	705.8	704.2	704.2	703.8	703.7	703.7
12.5°	734.4	732.8	733.4	731.9	729.4	729.8	730.4	729.9
15°	761.6	760.0	758.5	757.5	756.0	756.6	756.5	756.0
17.5°	789.2	786.2	785.7	784.2	783.7	783.7	783.7	784.2
20°	817.8	815.8	815.3	813.8	813.3	814.8	815.3	814.3
22.5°	848.4	847.4	848.5	847.5	849.0	850.0	850.5	849.5
25°	887.2	886.2	887.7	891.2	893.2	894.2	896.8	895.7
27.5°	937.0	936.0	939.4	944.5	947.5	952.6	955.0	956.1
30°	1001.3	1005.8	1007.8	1017.8	1019.9	1028.0	1028.0	1031.5
32.5°	1094.8	1103.4	1118.4	1134.0	1155.6	1171.2	1171.2	1179.2
35°	1299.8	1303.4	1315.0	1317.4	1322.0	1327.1	1322.0	1326.0
37.5°	1457.2	1441.6	1430.6	1415.0	1405.4	1405.4	1406.4	1405.4
40°	1537.6	1531.6	1526.6	1513.5	1511.6	1511.0	1511.0	1513.0
42.5°	1681.4	1666.8	1658.8	1647.8	1644.2	1643.2	1642.7	1643.7
45°	1868.4	1844.8	1823.2	1812.1	1802.6	1793.5	1796.6	1796.5
47.5°	2086.0	2049.4	2014.2	1995.1	1978.4	1971.0	1966.0	1964.4
50°	2351.0	2299.7	2254.4	2218.8	2194.6	2194.1	2196.6	2180.5
52.5°	2675.6	2594.8	2538.4	2490.1	2467.6	2465.0	2457.0	2448.0
55°	3035.5	2939.6	2846.6	2794.8	2765.1	2749.1	2739.5	2724.4
57.5°	3406.6	3277.4	3143.6	3060.7	3008.4	2972.2	2953.1	2944.6
60°	3692.6	3516.1	3339.7	3206.4	3119.5	3065.7	3032.6	3019.0
62.5°	3805.2	3565.9	3339.7	3164.8	3039.1	2964.7	2920.0	2900.4
65°	3671.0	3387.4	3130.1	2937.0	2796.8	2713.9	2665.1	2644.0
67.5°	3296.0	3045.6	2765.6	2573.6	2429.4	2347.4	2294.6	2279.1
70°	2763.2	2507.2	2239.8	2068.4	1939.8	1872.9	1818.2	1811.6
72.5°	2076.5	1855.8	1626.6	1484.8	1381.3	1270.8	1242.6	1256.7
75°	1331.0	1124.4	920.4	792.7	698.2	592.6	552.0	562.0
77.5°	630.4	488.1	352.4	272.4	228.8	195.6	187.0	182.0
80°	233.8	189.5	167.4	158.9	152.8	147.2	143.2	138.7
82.5°	151.3	147.8	143.3	141.8	137.2	130.2	117.1	111.6
85°	113.1	113.1	107.0	107.6	104.0	95.0	82.9	76.4
87.5°	33.2	29.6	27.2	25.2	24.6	22.1	16.1	14.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)