

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: P148400

Luminaire Tested: **TLM-E05-LED-E1-5XQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148400
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-E05-LED-E1-5XQ
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15901.9 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

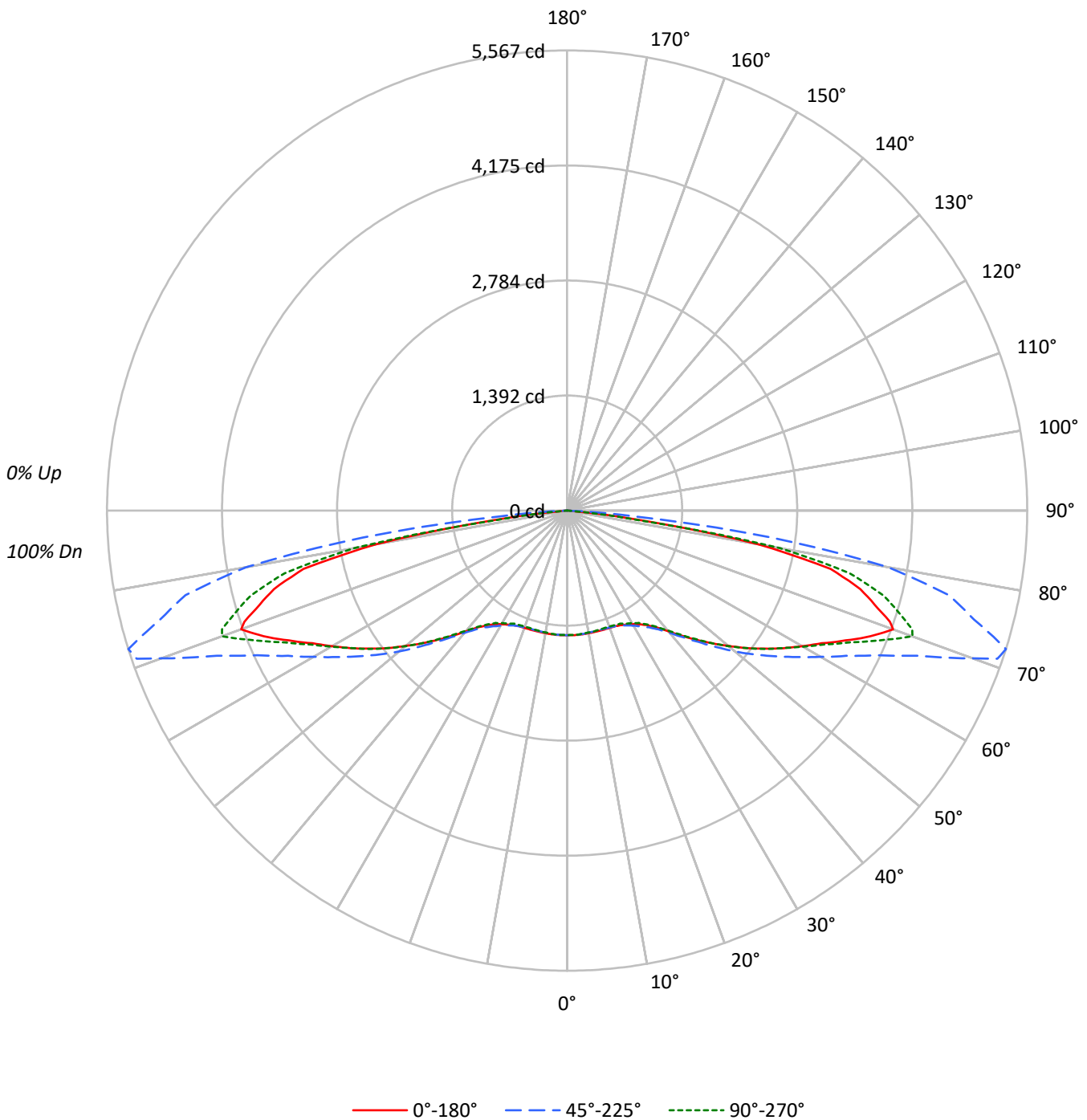
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	102	95	88	82	99	92	86	80	88	82	78	83	79	75	79	76	73	70					70			
2	88	76	66	57	85	74	64	56	70	62	55	66	59	53	63	57	52	49					49			
3	77	62	51	42	74	60	50	41	57	48	40	54	46	39	51	44	38	36					36			
4	69	53	41	32	66	51	40	31	48	38	31	46	37	30	43	36	30	27					27			
5	62	45	34	25	60	44	33	25	42	32	24	39	31	24	37	30	24	21					21			
6	57	40	29	20	54	39	28	20	37	27	20	35	26	20	33	25	19	17					17			
7	52	35	25	17	50	34	24	17	33	24	17	31	23	17	30	22	16	14					14			
8	48	32	22	15	46	31	21	15	30	21	14	28	20	14	27	20	14	12					12			
9	45	29	19	13	43	28	19	13	27	18	12	26	18	12	25	17	12	10					10			
10	42	26	17	11	40	26	17	11	25	17	11	24	16	11	23	16	11	9					9			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19540	19540	19540
5°	19647	19614	19603
10°	19829	19753	19720
15°	20228	20106	20050
20°	20839	20754	20610
25°	21882	21942	21618
30°	23759	24066	23534
35°	26781	27297	26610
40°	32293	32667	32025
45°	40503	41213	40349
50°	51363	53465	51480
55°	65852	69431	65985
60°	85074	91763	85398
65°	114076	126989	115739
70°	159129	198263	168608
75°	184102	255399	198423
80°	175191	294191	194363
85°	14255	119291	9300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	0.9
10°-20°	424.8	2.7
20°-30°	711.3	4.5
30°-40°	1084.3	6.8
40°-50°	1731.5	10.9
50°-60°	2662.2	16.7
60°-70°	3876.2	24.4
70°-80°	4366.6	27.5
80°-90°	901.4	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°	1279.6	8.0
0°-40°	2364.0	14.9
0°-60°	6757.7	42.5
0°-90°	15901.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15901.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1509	1508	1507	1506	1506	144
15°	1507	1502	1498	1491	1493	427
25°	1529	1531	1533	1518	1511	713
35°	1692	1704	1724	1694	1681	1080
45°	2208	2208	2247	2211	2200	1723
55°	2912	2921	3071	2934	2918	2620
65°	3718	3732	4138	3786	3772	3705
75°	3674	3907	5097	4229	3960	3742
85°	96	253	802	203	62	596
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°	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7
2.5°	1509.2	1510.0	1509.6	1508.8	1509.2	1508.8	1507.9	1507.5	1504.6	1506.2	1508.8
5°	1509.2	1508.3	1507.9	1507.5	1507.5	1508.8	1507.5	1506.2	1505.8	1506.7	1505.4
7.5°	1508.4	1506.6	1505.8	1505.4	1505.8	1506.2	1505.0	1503.4	1504.6	1503.4	1501.7
10°	1505.8	1504.6	1505.0	1503.4	1503.8	1503.4	1501.7	1500.4	1501.2	1500.0	1497.9
12.5°	1506.6	1504.6	1504.2	1503.4	1502.9	1502.5	1500.4	1498.3	1498.8	1497.9	1495.8
15°	1506.6	1505.4	1505.0	1503.3	1502.9	1502.1	1499.6	1498.8	1498.8	1497.5	1495.0
17.5°	1507.5	1506.7	1506.7	1504.6	1503.8	1503.3	1500.4	1499.2	1500.4	1497.9	1496.2
20°	1510.0	1509.2	1509.6	1508.4	1506.7	1506.6	1504.6	1503.8	1504.2	1503.8	1499.2
22.5°	1515.0	1515.0	1515.8	1515.4	1515.0	1515.4	1513.8	1513.8	1514.2	1514.2	1510.4
25°	1529.2	1528.8	1529.6	1529.6	1530.0	1532.9	1531.6	1531.2	1533.3	1533.4	1529.6
27.5°	1555.8	1555.0	1555.8	1556.7	1558.8	1562.5	1561.7	1562.9	1566.3	1565.4	1562.1
30°	1586.6	1585.8	1587.9	1590.4	1592.1	1597.9	1595.4	1601.7	1604.6	1607.1	1604.6
32.5°	1631.6	1631.7	1635.4	1637.1	1640.8	1646.7	1647.5	1652.5	1656.2	1660.4	1657.5
35°	1691.6	1690.8	1693.8	1696.6	1701.3	1706.6	1708.8	1715.4	1721.2	1724.2	1718.7
37.5°	1783.4	1778.8	1784.2	1785.8	1789.6	1790.8	1796.6	1805.0	1811.3	1810.4	1806.7
40°	1907.5	1906.6	1904.6	1902.1	1907.9	1910.0	1910.0	1921.2	1931.2	1929.6	1929.2
42.5°	2052.5	2048.8	2046.2	2046.2	2049.6	2050.4	2063.4	2071.7	2078.8	2080.4	2078.8
45°	2208.4	2204.6	2205.4	2203.8	2205.0	2210.4	2217.9	2233.3	2246.7	2247.1	2240.0
47.5°	2375.8	2364.2	2373.4	2360.4	2368.3	2372.5	2391.2	2413.7	2437.1	2441.2	2435.0
50°	2545.8	2544.6	2543.8	2541.2	2545.0	2554.2	2577.1	2612.5	2635.0	2650.0	2640.0
52.5°	2731.6	2725.4	2722.5	2718.3	2722.1	2740.0	2772.1	2802.9	2843.4	2860.4	2846.7
55°	2912.5	2910.4	2899.6	2899.2	2907.1	2935.0	2970.0	3007.9	3051.6	3070.8	3065.8
57.5°	3098.3	3086.2	3082.9	3077.9	3093.8	3120.0	3162.9	3231.2	3276.7	3298.3	3285.8
60°	3280.0	3270.9	3263.8	3262.1	3272.9	3309.6	3371.2	3453.4	3509.6	3537.9	3517.9
62.5°	3475.0	3469.2	3460.8	3451.2	3474.2	3521.2	3597.9	3688.8	3771.7	3806.6	3776.2
65°	3717.5	3705.4	3696.2	3684.2	3702.9	3762.1	3858.4	3986.2	4097.5	4138.3	4116.6
67.5°	3973.3	3962.1	3962.9	3955.4	3988.8	4070.8	4195.0	4368.8	4517.9	4587.5	4546.7
70°	4196.7	4202.9	4204.6	4235.0	4292.5	4417.5	4624.2	4896.2	5122.5	5228.8	5185.0
71°	4130.8	4144.6	4165.8	4197.5	4296.6	4444.6	4726.6	5056.2	5326.2	5506.2	5445.8
72.5°	3944.2	3952.5	3963.3	4011.6	4123.8	4319.6	4610.0	4986.7	5333.8	5566.7	5496.7
75°	3674.2	3682.1	3685.8	3719.6	3821.7	3992.5	4258.3	4592.5	4898.8	5097.1	5077.5
77.5°	3266.6	3267.9	3297.1	3349.2	3463.8	3659.2	3939.2	4285.8	4573.8	4728.0	4630.0
80°	2345.8	2330.0	2360.0	2427.1	2568.8	2792.9	3079.6	3475.4	3795.0	3939.2	3787.5
82.5°	892.5	940.8	1017.1	1127.9	1175.8	1425.0	1692.5	1925.0	2194.2	2495.0	2419.6
85°	95.8	107.9	135.4	167.9	212.1	293.3	405.4	553.3	682.1	801.7	711.7
87.5°	35.8	36.7	40.8	47.1	47.9	50.0	53.3	62.1	57.9	50.0	40.4
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°	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7	1506.7
2.5°	1506.7	1507.1	1506.7	1507.1	1507.1	1505.4	1505.8	1505.0
5°	1506.2	1505.0	1505.4	1505.8	1505.4	1506.2	1505.0	1505.8
7.5°	1504.2	1501.7	1502.5	1502.5	1501.7	1502.9	1502.1	1501.6
10°	1500.0	1496.6	1498.3	1497.5	1497.1	1497.5	1497.5	1497.5
12.5°	1496.2	1494.2	1494.6	1494.2	1493.8	1495.0	1494.6	1495.0
15°	1495.4	1492.1	1491.7	1490.8	1491.2	1492.1	1492.1	1493.4
17.5°	1494.6	1490.4	1490.0	1489.2	1489.6	1491.2	1491.7	1490.8
20°	1497.0	1493.8	1493.0	1492.1	1491.7	1493.8	1493.3	1493.4
22.5°	1508.8	1504.6	1504.2	1500.8	1499.6	1500.8	1500.0	1500.0
25°	1527.5	1522.5	1520.8	1516.2	1512.9	1512.9	1511.7	1510.8
27.5°	1561.2	1553.8	1552.1	1548.3	1543.8	1544.6	1542.1	1541.6
30°	1600.4	1593.8	1587.9	1582.5	1577.1	1575.0	1572.1	1571.6
32.5°	1651.7	1644.2	1637.1	1630.4	1622.9	1620.0	1615.0	1612.5
35°	1714.6	1704.6	1696.2	1691.6	1684.2	1680.4	1677.1	1680.8
37.5°	1802.5	1790.4	1786.2	1780.8	1775.8	1770.0	1771.2	1770.0
40°	1924.2	1913.3	1909.2	1899.6	1898.3	1891.7	1895.8	1891.7
42.5°	2074.6	2054.6	2051.6	2044.2	2041.7	2037.9	2039.6	2036.7
45°	2238.4	2220.4	2217.1	2205.0	2205.4	2196.6	2200.0	2200.0
47.5°	2422.5	2403.7	2388.3	2379.6	2376.2	2370.8	2373.8	2373.4
50°	2612.5	2587.1	2570.0	2552.9	2545.4	2547.5	2541.7	2551.6
52.5°	2816.7	2778.8	2754.6	2738.3	2724.2	2727.1	2727.9	2730.8
55°	3027.9	2979.6	2944.6	2923.3	2910.4	2911.2	2915.0	2918.4
57.5°	3240.4	3180.0	3132.5	3100.8	3092.5	3096.2	3096.3	3095.9
60°	3460.8	3388.3	3327.1	3291.2	3283.8	3281.7	3297.9	3292.5
62.5°	3697.5	3610.4	3547.1	3501.2	3490.4	3497.9	3512.5	3509.2
65°	4011.2	3890.8	3809.2	3763.8	3745.4	3752.9	3772.5	3771.7
67.5°	4415.8	4247.5	4139.6	4081.2	4067.9	4077.0	4087.9	4098.4
70°	5020.8	4780.4	4626.3	4500.0	4445.8	4435.4	4446.2	4446.7
71°	5233.8	4957.5	4712.1	4557.9	4469.2	4431.7	4434.6	4415.8
72.5°	5225.0	4884.6	4597.5	4436.3	4312.9	4282.9	4268.3	4245.8
75°	4872.9	4566.2	4317.1	4141.2	4022.5	3987.1	3961.2	3960.0
77.5°	4419.2	4192.9	3918.3	3732.1	3587.5	3528.8	3502.5	3501.6
80°	3552.5	3213.8	3012.9	2900.9	2726.2	2675.8	2622.5	2602.5
82.5°	2148.3	1678.8	1365.0	1212.9	1128.8	929.6	834.2	789.2
85°	500.4	355.4	245.0	160.8	115.8	92.1	70.8	62.5
87.5°	33.8	26.7	23.8	19.2	14.6	14.2	8.8	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)