

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: P148401

Luminaire Tested: **TLM-E05-LED-E1-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P148401
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-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (105) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

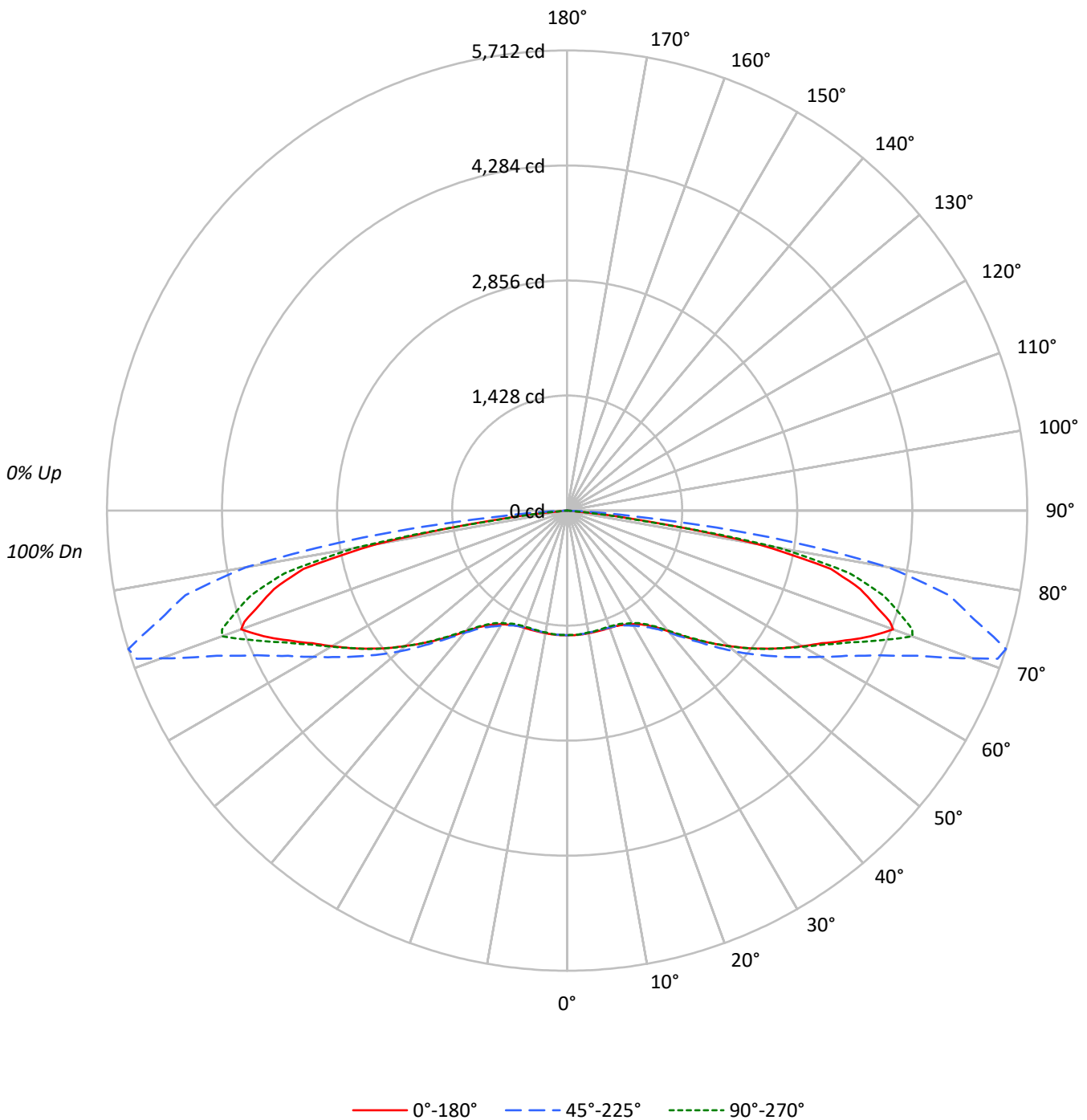
Lumens per Lamp: N/A
Luminaire Lumens: 16317.0 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 2.11 / 2.1 / 2.7
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

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										
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																				
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°	20049	20049	20049
5°	20160	20126	20116
10°	20348	20269	20235
15°	20757	20630	20574
20°	21383	21295	21148
25°	22451	22514	22184
30°	24381	24693	24150
35°	27481	28009	27307
40°	33136	33518	32860
45°	41559	42287	41401
50°	52702	54861	52824
55°	67572	71244	67708
60°	87294	94160	87629
65°	117056	130306	118759
70°	163281	203435	173010
75°	188907	262068	203604
80°	179762	301869	199441
85°	14642	122401	9538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.3	0.9
10°-20°	435.8	2.7
20°-30°	729.8	4.5
30°-40°	1112.7	6.8
40°-50°	1776.7	10.9
50°-60°	2731.7	16.7
60°-70°	3977.4	24.4
70°-80°	4480.6	27.5
80°-90°	924.9	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°	1313.0	8.0
0°-40°	2425.7	14.9
0°-60°	6934.1	42.5
0°-90°	16317.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16317.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1546	1546	1546	1546	1546	
5°	1549	1547	1546	1545	1545	148
15°	1546	1542	1537	1530	1532	438
25°	1569	1571	1573	1558	1550	731
35°	1736	1748	1769	1738	1725	1108
45°	2266	2265	2306	2269	2257	1768
55°	2989	2997	3151	3011	2995	2689
65°	3815	3830	4246	3885	3870	3801
75°	3770	4009	5230	4340	4063	3840
85°	98	259	823	208	64	612
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°	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0
2.5°	1548.6	1549.4	1549.0	1548.2	1548.6	1548.1	1547.3	1546.9	1543.9	1545.6	1548.2
5°	1548.6	1547.7	1547.3	1546.8	1546.8	1548.1	1546.9	1545.6	1545.2	1546.0	1544.7
7.5°	1547.7	1546.0	1545.1	1544.7	1545.1	1545.6	1544.3	1542.6	1543.9	1542.6	1540.9
10°	1545.2	1543.9	1544.3	1542.6	1543.0	1542.6	1540.9	1539.6	1540.4	1539.2	1537.0
12.5°	1546.0	1543.9	1543.4	1542.6	1542.2	1541.7	1539.6	1537.4	1537.8	1537.0	1534.9
15°	1546.0	1544.7	1544.3	1542.6	1542.2	1541.3	1538.7	1537.9	1537.9	1536.6	1534.0
17.5°	1546.8	1546.0	1546.0	1543.9	1543.0	1542.6	1539.6	1538.3	1539.6	1537.0	1535.3
20°	1549.4	1548.6	1549.0	1547.7	1546.0	1546.0	1543.8	1543.0	1543.4	1543.0	1538.3
22.5°	1554.6	1554.6	1555.4	1555.0	1554.6	1555.0	1553.2	1553.2	1553.7	1553.7	1549.9
25°	1569.0	1568.6	1569.5	1569.5	1569.9	1573.0	1571.6	1571.2	1573.4	1573.4	1569.5
27.5°	1596.4	1595.6	1596.4	1597.3	1599.4	1603.3	1602.4	1603.7	1607.1	1606.3	1602.9
30°	1628.1	1627.2	1629.4	1631.9	1633.7	1639.6	1637.1	1643.5	1646.5	1649.0	1646.4
32.5°	1674.2	1674.2	1678.1	1679.8	1683.6	1689.6	1690.5	1695.6	1699.5	1703.8	1700.8
35°	1735.8	1735.0	1738.0	1741.0	1745.6	1751.2	1753.4	1760.2	1766.2	1769.2	1763.6
37.5°	1829.9	1825.2	1830.7	1832.4	1836.3	1837.6	1843.6	1852.1	1858.5	1857.7	1853.8
40°	1957.3	1956.4	1954.3	1951.7	1957.7	1959.8	1959.9	1971.4	1981.6	1979.9	1979.5
42.5°	2106.1	2102.2	2099.7	2099.7	2103.1	2104.0	2117.2	2125.8	2133.0	2134.7	2133.0
45°	2266.0	2262.1	2263.0	2261.3	2262.6	2268.1	2275.8	2291.6	2305.3	2305.7	2298.5
47.5°	2437.9	2425.9	2435.3	2422.0	2430.2	2434.4	2453.6	2476.8	2500.7	2505.0	2498.6
50°	2612.2	2611.0	2610.2	2607.6	2611.4	2620.8	2644.4	2680.7	2703.8	2719.2	2709.0
52.5°	2803.0	2796.6	2793.6	2789.3	2793.1	2811.5	2844.4	2876.1	2917.6	2935.1	2921.0
55°	2988.6	2986.4	2975.3	2974.8	2983.0	3011.6	3047.5	3086.4	3131.3	3151.0	3145.9
57.5°	3179.2	3166.8	3163.4	3158.3	3174.5	3201.4	3245.5	3315.6	3362.2	3384.4	3371.6
60°	3365.6	3356.2	3349.0	3347.2	3358.4	3396.0	3459.2	3543.5	3601.2	3630.3	3609.8
62.5°	3565.7	3559.7	3551.2	3541.4	3564.8	3613.2	3691.8	3785.0	3870.1	3906.0	3874.8
65°	3814.6	3802.2	3792.7	3780.4	3799.6	3860.3	3959.1	4090.3	4204.4	4246.4	4224.2
67.5°	4077.1	4065.5	4066.4	4058.7	4092.8	4177.1	4304.5	4482.8	4635.8	4707.2	4665.4
70°	4306.2	4312.6	4314.4	4345.6	4404.6	4532.8	4744.9	5024.0	5256.2	5365.2	5320.4
71°	4238.7	4252.8	4274.6	4307.1	4408.8	4560.6	4850.1	5188.2	5465.3	5650.0	5588.0
72.5°	4047.2	4055.7	4066.8	4116.4	4231.4	4432.4	4730.4	5116.8	5473.0	5712.0	5640.2
75°	3770.1	3778.2	3782.0	3816.7	3921.4	4096.7	4369.5	4712.4	5026.6	5230.2	5210.0
77.5°	3352.0	3353.2	3383.2	3436.6	3554.2	3754.7	4042.0	4397.7	4693.1	4851.3	4750.8
80°	2407.0	2390.8	2421.6	2490.4	2635.8	2865.8	3160.0	3566.2	3894.1	4042.0	3886.4
82.5°	915.8	965.4	1043.6	1157.3	1206.6	1462.2	1736.7	1975.2	2251.5	2560.2	2482.8
85°	98.4	110.8	139.0	172.3	217.6	301.0	416.0	567.8	699.9	822.6	730.2
87.5°	36.8	37.6	41.9	48.3	49.2	51.3	54.7	63.7	59.4	51.3	41.5
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°	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0	1546.0
2.5°	1546.0	1546.4	1546.0	1546.4	1546.4	1544.7	1545.2	1544.3
5°	1545.6	1544.3	1544.7	1545.1	1544.7	1545.6	1544.3	1545.2
7.5°	1543.4	1540.8	1541.7	1541.7	1540.8	1542.1	1541.3	1540.8
10°	1539.2	1535.7	1537.4	1536.6	1536.2	1536.6	1536.6	1536.6
12.5°	1535.3	1533.2	1533.6	1533.2	1532.8	1534.1	1533.6	1534.1
15°	1534.4	1531.0	1530.6	1529.8	1530.2	1531.0	1531.0	1532.4
17.5°	1533.6	1529.3	1528.9	1528.0	1528.4	1530.2	1530.6	1529.8
20°	1536.1	1532.7	1531.9	1531.0	1530.6	1532.8	1532.3	1532.4
22.5°	1548.1	1543.9	1543.4	1540.0	1538.8	1540.0	1539.1	1539.2
25°	1567.4	1562.2	1560.6	1555.9	1552.4	1552.4	1551.1	1550.3
27.5°	1602.0	1594.3	1592.6	1588.8	1584.1	1584.9	1582.4	1581.9
30°	1642.2	1635.4	1629.4	1623.8	1618.2	1616.1	1613.1	1612.7
32.5°	1694.8	1687.1	1679.8	1673.0	1665.2	1662.3	1657.1	1654.6
35°	1759.3	1749.1	1740.5	1735.8	1728.2	1724.3	1720.9	1724.8
37.5°	1849.6	1837.2	1832.9	1827.3	1822.2	1816.2	1817.5	1816.2
40°	1974.4	1963.3	1959.0	1949.2	1947.9	1941.0	1945.3	1941.0
42.5°	2128.7	2108.2	2105.2	2097.5	2095.0	2091.1	2092.9	2089.9
45°	2296.8	2278.4	2275.0	2262.5	2263.0	2254.0	2257.5	2257.4
47.5°	2485.7	2466.5	2450.7	2441.7	2438.3	2432.7	2435.8	2435.2
50°	2680.7	2654.6	2637.1	2619.6	2611.9	2614.0	2608.0	2618.2
52.5°	2890.2	2851.3	2826.5	2809.8	2795.2	2798.2	2799.2	2802.2
55°	3107.0	3057.4	3021.5	2999.7	2986.4	2987.2	2991.1	2994.6
57.5°	3325.0	3263.0	3214.3	3181.8	3173.2	3177.1	3177.1	3176.6
60°	3551.2	3476.8	3414.0	3377.2	3369.5	3367.4	3384.0	3378.5
62.5°	3794.0	3704.7	3639.7	3592.6	3581.6	3589.2	3604.2	3600.8
65°	4116.0	3992.4	3908.6	3862.0	3843.2	3850.9	3871.0	3870.1
67.5°	4531.1	4358.4	4247.6	4187.8	4174.1	4183.5	4194.6	4205.3
70°	5151.9	4905.2	4747.0	4617.5	4561.9	4551.2	4562.3	4562.8
71°	5370.4	5086.9	4835.1	4676.9	4585.8	4547.4	4550.4	4531.1
72.5°	5361.4	5012.1	4717.5	4552.1	4425.5	4394.7	4379.7	4356.6
75°	5000.1	4685.4	4429.8	4249.4	4127.5	4091.2	4064.6	4063.4
77.5°	4534.5	4302.4	4020.6	3829.5	3681.2	3620.9	3594.0	3593.1
80°	3645.2	3297.7	3091.5	2976.6	2797.4	2745.7	2691.0	2670.5
82.5°	2204.4	1722.6	1400.6	1244.6	1158.2	953.9	856.0	809.8
85°	513.5	364.7	251.4	165.0	118.8	94.5	72.7	64.1
87.5°	34.6	27.4	24.4	19.7	15.0	14.6	9.0	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)