

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: P147868

Luminaire Tested: **TLM-E04-LED-E1-5WQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147868
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-E04-LED-E1-5WQ-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

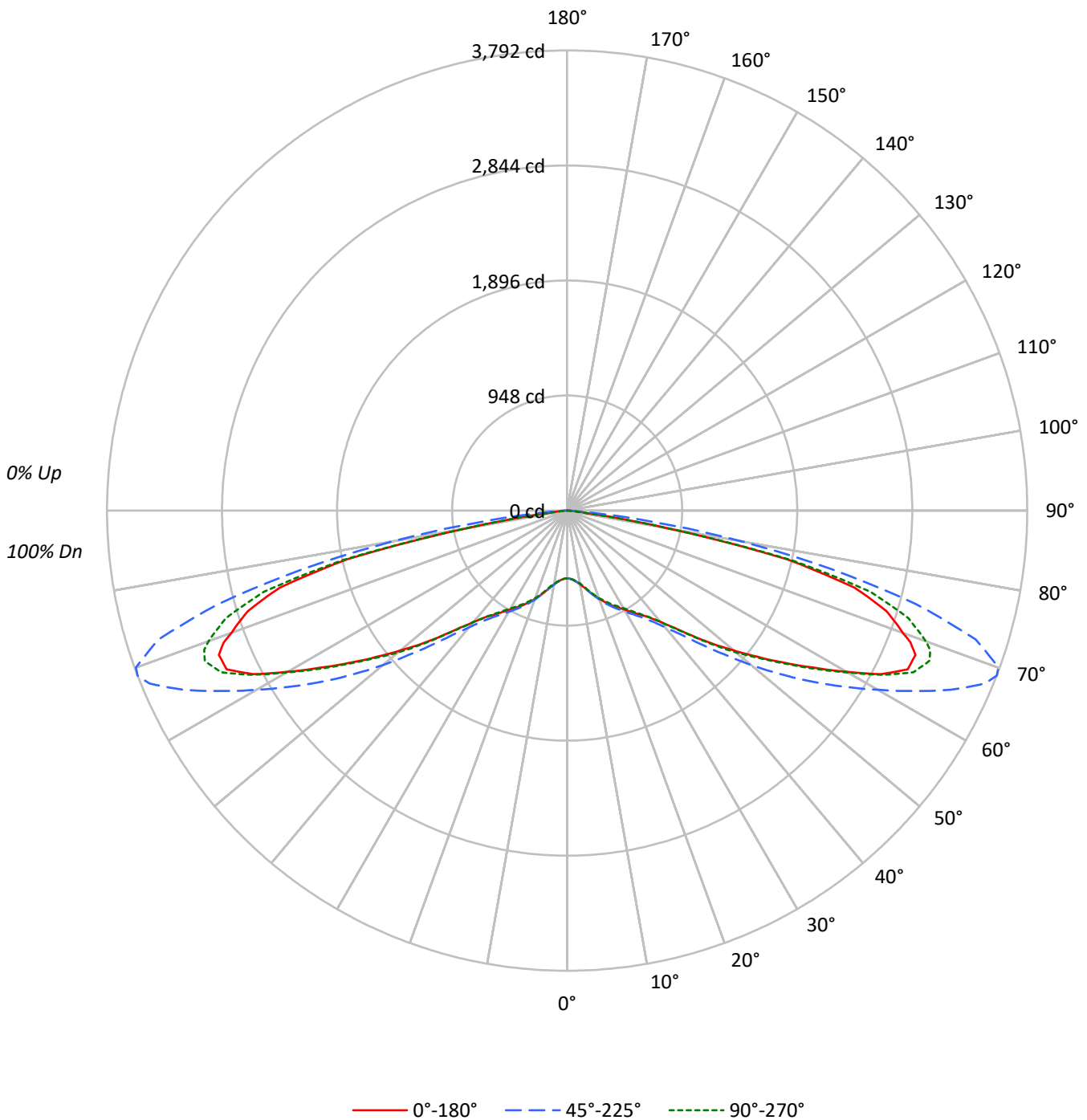
Lumens per Lamp: N/A
Luminaire Lumens: 10748.4 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	8968	8968	8968
5°	9255	9255	9220
10°	10078	10060	9967
15°	11436	11491	11323
20°	13236	13352	13122
25°	15239	15479	15021
30°	17453	17848	17243
35°	20524	21077	20348
40°	25087	26244	25087
45°	33135	35282	33262
50°	44803	49445	45423
55°	61243	68808	61590
60°	85334	94877	85658
65°	117685	132826	119737
70°	138278	177659	147686
75°	152133	184684	160588
80°	76938	134613	79232
85°	9954	36516	7668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	0.5
10°-20°	197.9	1.8
20°-30°	400.7	3.7
30°-40°	671.9	6.3
40°-50°	1185.1	11.0
50°-60°	2090.0	19.4
60°-70°	3190.8	29.7
70°-80°	2666.2	24.8
80°-90°	289.7	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°	654.7	6.1
0°-40°	1326.6	12.3
0°-60°	4601.7	42.8
0°-90°	10748.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10748.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	574	575	574	572	572	56
15°	688	691	691	685	681	198
25°	860	864	873	858	847	399
35°	1046	1053	1075	1052	1038	665
45°	1458	1492	1553	1505	1464	1146
55°	2186	2290	2457	2309	2199	1981
65°	3096	3263	3494	3289	3150	2963
75°	2451	2589	2975	2754	2587	2360
85°	54	90	198	78	42	178
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°	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2
2.5°	562.7	563.8	562.7	562.7	562.7	562.7	562.7	561.5	561.5	561.5	562.7
5°	573.9	575.0	573.9	575.0	575.0	575.0	575.0	573.9	573.9	573.9	573.9
7.5°	591.9	591.9	591.9	593.0	591.9	591.9	593.0	591.9	591.9	591.9	591.9
10°	617.8	616.7	616.7	616.7	616.7	616.7	617.8	617.8	617.8	616.7	616.7
12.5°	649.3	648.2	649.3	649.3	650.4	650.4	650.4	650.4	650.4	650.4	649.3
15°	687.6	687.6	687.6	688.7	690.9	690.9	689.8	690.9	690.9	690.9	690.9
17.5°	730.3	732.6	730.3	731.5	732.6	731.5	733.7	734.8	736.0	734.8	731.5
20°	774.2	775.3	775.3	775.3	775.3	777.6	778.7	778.7	782.1	781.0	779.8
22.5°	815.9	818.1	818.1	819.2	819.2	822.6	822.6	822.6	824.9	827.1	824.9
25°	859.7	858.6	858.6	860.9	862.0	866.5	866.5	868.7	872.1	873.2	871.0
27.5°	899.1	898.0	898.0	901.4	902.5	908.1	908.1	912.6	914.9	916.0	913.8
30°	940.8	940.8	939.6	943.0	946.4	950.9	953.1	957.6	961.0	962.1	959.9
32.5°	990.3	988.0	989.2	991.4	993.7	998.2	1001.5	1007.2	1011.7	1012.8	1010.5
35°	1046.5	1043.2	1044.3	1046.5	1049.9	1056.7	1062.3	1065.7	1072.4	1074.7	1070.2
37.5°	1108.4	1109.6	1108.4	1114.1	1119.7	1127.6	1134.3	1138.8	1145.6	1149.0	1145.6
40°	1196.2	1192.8	1196.2	1201.8	1210.8	1221.0	1234.5	1237.9	1244.6	1251.4	1243.5
42.5°	1309.9	1307.6	1315.5	1320.0	1330.1	1341.4	1358.3	1367.3	1377.4	1381.9	1375.1
45°	1458.4	1458.4	1467.4	1468.5	1484.3	1498.9	1522.6	1533.8	1552.9	1552.9	1552.9
47.5°	1622.7	1629.5	1635.1	1646.3	1657.6	1684.6	1708.2	1733.0	1751.0	1753.3	1749.9
50°	1792.6	1799.4	1816.3	1832.0	1856.8	1890.5	1916.4	1949.1	1964.8	1978.3	1973.8
52.5°	1980.6	1981.7	2001.9	2022.2	2058.2	2095.3	2137.0	2170.7	2198.9	2211.3	2201.1
55°	2186.5	2188.7	2206.8	2228.1	2268.6	2311.4	2363.2	2398.1	2434.1	2456.6	2439.7
57.5°	2409.3	2410.4	2428.4	2454.3	2502.7	2545.5	2595.0	2644.5	2678.3	2698.5	2687.3
60°	2655.8	2661.4	2674.9	2707.5	2753.7	2798.7	2848.2	2892.1	2931.5	2952.8	2941.6
62.5°	2919.1	2924.7	2943.8	2969.7	3010.2	3059.7	3107.0	3163.3	3195.9	3219.5	3202.7
65°	3095.8	3105.9	3136.3	3171.2	3230.8	3294.9	3350.1	3426.6	3466.0	3494.1	3478.4
67.5°	3107.0	3112.6	3149.8	3202.7	3282.6	3379.3	3491.9	3611.2	3688.8	3725.9	3698.9
69°	3030.5	3038.4	3074.4	3134.0	3222.9	3335.5	3469.4	3617.9	3737.2	3792.3	3766.5
70°	2943.8	2960.7	3000.1	3065.4	3152.0	3270.2	3408.6	3567.3	3706.8	3782.2	3763.1
72.5°	2761.5	2766.0	2791.9	2843.7	2910.1	3008.0	3138.5	3288.2	3421.0	3529.0	3544.8
75°	2450.9	2465.6	2484.7	2519.6	2553.4	2624.2	2712.0	2814.4	2892.1	2975.3	2978.7
77.5°	1852.3	1896.2	1910.8	1918.7	1933.3	1989.6	2066.1	2155.0	2219.1	2232.6	2230.4
80°	831.6	890.1	903.6	967.8	1007.2	1100.6	1217.6	1353.8	1444.9	1455.0	1430.3
82.5°	163.2	174.4	203.7	254.3	346.6	401.7	478.3	573.9	661.7	712.3	681.9
85°	54.0	57.4	66.4	73.1	84.4	95.7	115.9	144.0	178.9	198.1	176.7
87.5°	21.4	21.4	24.8	27.0	29.3	29.3	29.3	27.0	25.9	21.4	19.1
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°	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2
2.5°	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5
5°	573.9	572.8	572.8	571.7	571.7	571.7	571.7	571.7
7.5°	590.8	589.7	588.5	589.7	588.5	588.5	588.5	588.5
10°	616.7	614.4	613.3	612.2	612.2	612.2	611.0	611.0
12.5°	647.1	647.1	645.9	644.8	642.6	643.7	642.6	640.3
15°	688.7	686.4	685.3	684.2	681.9	681.9	681.9	680.8
17.5°	730.3	728.1	728.1	724.7	723.6	723.6	723.6	724.7
20°	776.5	773.1	770.8	768.6	766.3	767.5	765.2	767.5
22.5°	822.6	818.1	815.9	812.5	809.1	809.1	808.0	805.7
25°	867.6	862.0	859.7	856.4	851.9	851.9	849.6	847.4
27.5°	910.4	904.8	902.5	895.8	891.3	890.1	887.9	886.8
30°	957.6	950.9	947.5	940.8	934.0	932.9	929.5	929.5
32.5°	1007.2	1000.4	998.2	988.0	982.4	982.4	980.2	977.9
35°	1069.1	1058.9	1056.7	1046.5	1038.7	1038.7	1036.4	1037.5
37.5°	1142.2	1134.3	1126.4	1118.6	1109.6	1108.4	1106.2	1103.9
40°	1240.1	1231.1	1222.1	1210.8	1203.0	1200.7	1197.3	1196.2
42.5°	1370.6	1361.6	1343.6	1334.6	1326.8	1320.0	1318.9	1317.8
45°	1537.2	1525.9	1513.6	1496.7	1486.5	1471.9	1469.7	1464.0
47.5°	1737.5	1716.1	1694.7	1680.1	1664.4	1647.5	1644.1	1635.1
50°	1950.2	1933.3	1897.3	1873.7	1848.9	1832.0	1820.8	1817.4
52.5°	2178.6	2147.1	2111.1	2079.6	2043.6	2021.1	2000.8	1995.2
55°	2417.2	2372.2	2327.2	2290.0	2254.0	2227.0	2207.9	2198.9
57.5°	2655.8	2606.2	2556.7	2516.2	2485.8	2450.9	2431.8	2427.3
60°	2904.5	2857.2	2806.6	2766.0	2728.9	2698.5	2687.3	2665.9
62.5°	3167.8	3118.3	3071.0	3031.6	2984.4	2963.0	2943.8	2931.5
65°	3426.6	3369.2	3309.6	3267.9	3220.7	3190.3	3166.7	3149.8
67.5°	3626.9	3540.3	3460.4	3390.6	3326.4	3279.2	3248.8	3233.0
69°	3683.2	3575.1	3472.7	3381.6	3306.2	3253.3	3219.5	3203.8
70°	3676.4	3557.1	3444.6	3344.5	3262.3	3206.0	3173.4	3144.1
72.5°	3468.2	3359.1	3234.2	3125.0	3050.7	2996.7	2964.1	2948.3
75°	2959.6	2886.4	2796.4	2712.0	2658.0	2626.5	2586.0	2587.1
77.5°	2155.0	2157.2	2096.5	2009.8	1949.1	1937.8	1919.8	1901.8
80°	1336.9	1230.0	1160.2	1066.8	998.2	938.5	912.6	856.4
82.5°	616.7	481.6	373.6	282.5	217.2	169.9	148.5	121.5
85°	137.3	104.7	86.6	69.8	59.6	55.1	45.0	41.6
87.5°	19.1	16.9	15.8	14.6	12.4	9.0	6.8	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)