

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: P147885

Luminaire Tested: **TLM-F05-LED-E1-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147885
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-F05-LED-E1-5WQ
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

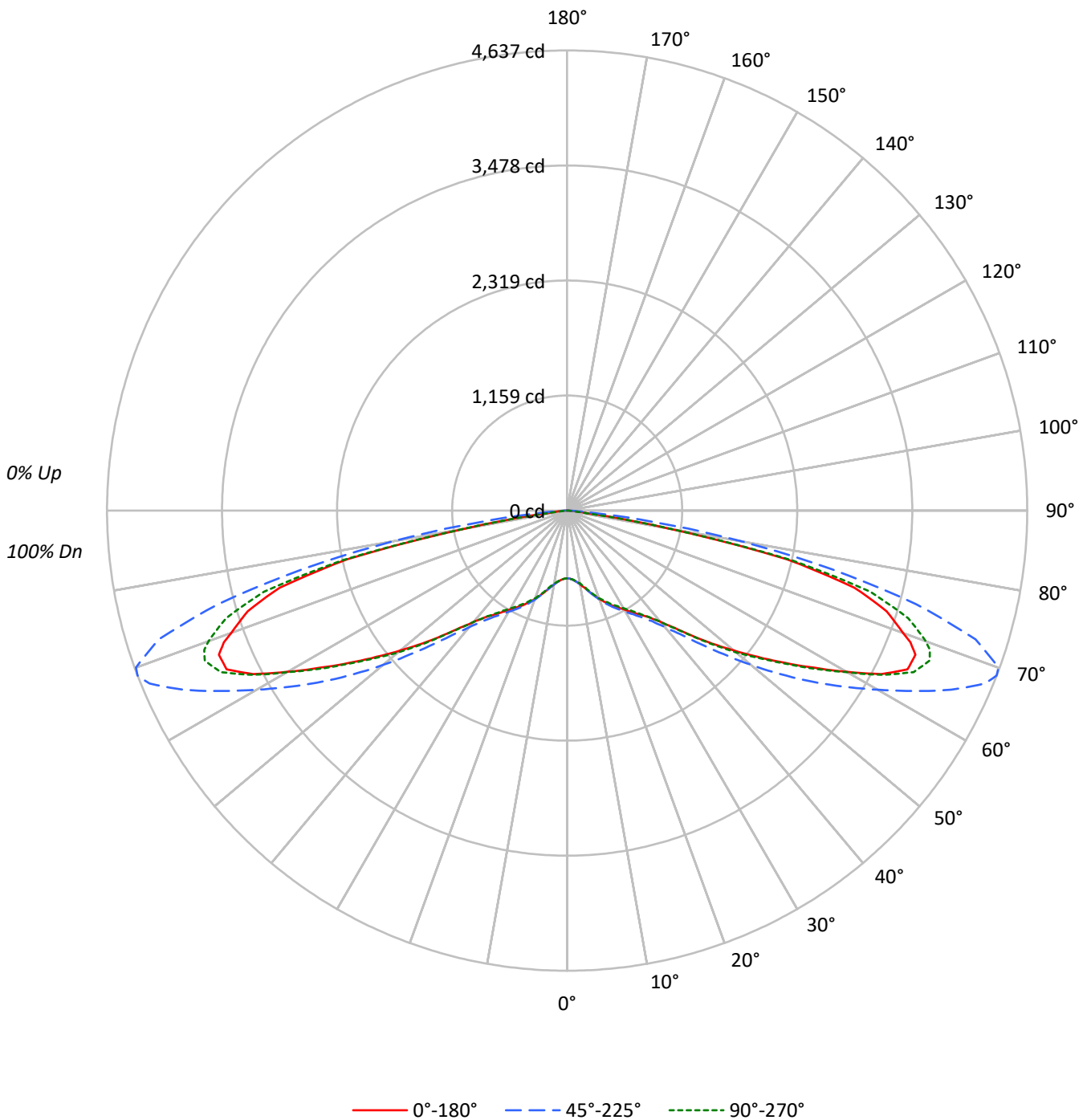
Lumens per Lamp: N/A
Luminaire Lumens: 13141.5 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 133.3
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	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°	8850	8850	8850
5°	9135	9135	9098
10°	9948	9929	9838
15°	11287	11342	11176
20°	13064	13178	12949
25°	15042	15278	14824
30°	17224	17616	17019
35°	20258	20803	20084
40°	24761	25902	24761
45°	32703	34823	32829
50°	44221	48801	44830
55°	60443	67909	60787
60°	84221	93641	84540
65°	116147	131095	118176
70°	136477	175342	145763
75°	150155	182278	158493
80°	75938	132861	78193
85°	9821	36039	7574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	0.5
10°-20°	242.0	1.8
20°-30°	490.0	3.7
30°-40°	821.5	6.3
40°-50°	1449.0	11.0
50°-60°	2555.3	19.4
60°-70°	3901.2	29.7
70°-80°	3259.9	24.8
80°-90°	354.2	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°	800.5	6.1
0°-40°	1622.0	12.3
0°-60°	5626.3	42.8
0°-90°	13141.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13141.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	702	703	702	700	699	69
15°	841	845	845	837	832	242
25°	1051	1057	1068	1049	1036	488
35°	1280	1288	1314	1286	1269	813
45°	1783	1824	1899	1840	1790	1401
55°	2673	2800	3004	2823	2688	2422
65°	3785	3989	4272	4021	3851	3623
75°	2997	3165	3638	3367	3163	2886
85°	66	110	242	96	51	217
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°	682.4	682.4	682.4	682.4	682.4	682.4	682.4	682.4	682.4	682.4	682.4
2.5°	687.9	689.3	687.9	687.9	687.9	687.9	687.9	686.6	686.6	686.6	687.9
5°	701.7	703.1	701.7	703.1	703.1	703.1	703.1	701.7	701.7	701.7	701.7
7.5°	723.7	723.7	723.7	725.1	723.7	723.7	725.1	723.7	723.7	723.7	723.7
10°	755.4	754.0	754.0	754.0	754.0	754.0	755.4	755.4	755.4	754.0	754.0
12.5°	793.9	792.5	793.9	793.9	795.3	795.3	795.3	795.3	795.3	795.3	793.9
15°	840.7	840.7	840.7	842.0	844.8	844.8	843.4	844.8	844.8	844.8	844.8
17.5°	892.9	895.7	892.9	894.3	895.7	894.3	897.1	898.4	899.8	898.4	894.3
20°	946.6	948.0	948.0	948.0	948.0	950.7	952.1	952.1	956.2	954.9	953.5
22.5°	997.5	1000.3	1000.3	1001.6	1001.6	1005.8	1005.8	1005.8	1008.5	1011.3	1008.5
25°	1051.2	1049.8	1049.8	1052.5	1053.9	1059.4	1059.4	1062.2	1066.3	1067.7	1064.9
27.5°	1099.3	1097.9	1097.9	1102.1	1103.5	1110.3	1110.3	1115.8	1118.6	1120.0	1117.2
30°	1150.2	1150.2	1148.9	1153.0	1157.1	1162.6	1165.4	1170.9	1175.0	1176.4	1173.6
32.5°	1210.8	1208.0	1209.4	1212.1	1214.9	1220.4	1224.5	1231.4	1236.9	1238.3	1235.5
35°	1279.6	1275.4	1276.8	1279.6	1283.7	1291.9	1298.8	1303.0	1311.2	1314.0	1308.5
37.5°	1355.2	1356.6	1355.2	1362.1	1369.0	1378.6	1386.9	1392.4	1400.6	1404.8	1400.6
40°	1462.6	1458.4	1462.6	1469.4	1480.4	1492.8	1509.3	1513.5	1521.7	1530.0	1520.3
42.5°	1601.5	1598.8	1608.4	1613.9	1626.3	1640.0	1660.7	1671.7	1684.1	1689.6	1681.3
45°	1783.1	1783.1	1794.1	1795.5	1814.8	1832.7	1861.6	1875.3	1898.7	1898.7	1898.7
47.5°	1984.0	1992.3	1999.1	2012.9	2026.7	2059.7	2088.6	2118.8	2140.9	2143.6	2139.5
50°	2191.8	2200.0	2220.7	2239.9	2270.2	2311.5	2343.1	2383.0	2402.3	2418.8	2413.3
52.5°	2421.5	2422.9	2447.7	2472.4	2516.5	2561.9	2612.8	2654.1	2688.5	2703.6	2691.2
55°	2673.3	2676.1	2698.1	2724.2	2773.8	2826.0	2889.3	2932.0	2976.0	3003.5	2982.9
57.5°	2945.7	2947.1	2969.1	3000.8	3059.9	3112.2	3172.8	3233.3	3274.6	3299.3	3285.6
60°	3247.1	3253.9	3270.5	3310.4	3366.8	3421.8	3482.3	3536.0	3584.2	3610.3	3596.5
62.5°	3569.0	3575.9	3599.3	3630.9	3680.5	3741.0	3798.8	3867.6	3907.5	3936.4	3915.7
65°	3785.0	3797.4	3834.6	3877.2	3950.1	4028.6	4096.0	4189.5	4237.7	4272.1	4252.8
67.5°	3798.8	3805.7	3851.1	3915.7	4013.4	4131.8	4269.3	4415.2	4510.1	4555.5	4522.5
69°	3705.2	3714.9	3758.9	3831.8	3940.5	4078.1	4241.8	4423.4	4569.3	4636.7	4605.1
70°	3599.3	3619.9	3668.1	3747.9	3853.8	3998.3	4167.5	4361.5	4532.1	4624.3	4600.9
72.5°	3376.4	3381.9	3413.5	3476.8	3558.0	3677.7	3837.3	4020.3	4182.7	4314.7	4334.0
75°	2996.7	3014.5	3037.9	3080.6	3121.9	3208.5	3315.9	3441.1	3536.0	3637.8	3641.9
77.5°	2264.7	2318.3	2336.2	2345.9	2363.8	2432.5	2526.1	2634.8	2713.2	2729.7	2727.0
80°	1016.8	1088.3	1104.8	1183.3	1231.4	1345.6	1488.7	1655.2	1766.6	1779.0	1748.7
82.5°	199.5	213.3	249.0	310.9	423.8	491.2	584.7	701.7	809.0	870.9	833.8
85°	66.0	70.2	81.2	89.4	103.2	116.9	141.7	176.1	218.8	242.2	216.0
87.5°	26.1	26.1	30.3	33.0	35.8	35.8	35.8	33.0	31.6	26.1	23.4
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°	682.4	682.4	682.4	682.4	682.4	682.4	682.4	682.4
2.5°	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6
5°	701.7	700.3	700.3	698.9	698.9	698.9	698.9	698.9
7.5°	722.3	721.0	719.6	721.0	719.6	719.6	719.6	719.6
10°	754.0	751.2	749.9	748.5	748.5	748.5	747.1	747.1
12.5°	791.1	791.1	789.8	788.4	785.6	787.0	785.6	782.9
15°	842.0	839.3	837.9	836.5	833.8	833.8	833.8	832.4
17.5°	892.9	890.2	890.2	886.1	884.7	884.7	884.7	886.1
20°	949.4	945.2	942.5	939.7	937.0	938.3	935.6	938.3
22.5°	1005.8	1000.3	997.5	993.4	989.3	989.3	987.9	985.1
25°	1060.8	1053.9	1051.2	1047.0	1041.5	1041.5	1038.8	1036.0
27.5°	1113.1	1106.2	1103.5	1095.2	1089.7	1088.3	1085.6	1084.2
30°	1170.9	1162.6	1158.5	1150.2	1142.0	1140.6	1136.5	1136.5
32.5°	1231.4	1223.2	1220.4	1208.0	1201.1	1201.1	1198.4	1195.6
35°	1307.1	1294.7	1291.9	1279.6	1269.9	1269.9	1267.2	1268.6
37.5°	1396.5	1386.9	1377.3	1367.6	1356.6	1355.2	1352.5	1349.7
40°	1516.2	1505.2	1494.2	1480.4	1470.8	1468.1	1463.9	1462.6
42.5°	1675.8	1664.8	1642.8	1631.8	1622.2	1613.9	1612.5	1611.1
45°	1879.4	1865.7	1850.6	1829.9	1817.5	1799.6	1796.9	1790.0
47.5°	2124.4	2098.2	2072.1	2054.2	2034.9	2014.3	2010.2	1999.1
50°	2384.4	2363.8	2319.7	2290.8	2260.6	2239.9	2226.2	2222.0
52.5°	2663.7	2625.2	2581.1	2542.6	2498.6	2471.1	2446.3	2439.4
55°	2955.4	2900.3	2845.3	2799.9	2755.9	2722.9	2699.5	2688.5
57.5°	3247.1	3186.5	3126.0	3076.5	3039.3	2996.7	2973.3	2967.8
60°	3551.1	3493.3	3431.4	3381.9	3336.5	3299.3	3285.6	3259.4
62.5°	3873.1	3812.5	3754.8	3706.6	3648.8	3622.7	3599.3	3584.2
65°	4189.5	4119.4	4046.4	3995.5	3937.8	3900.6	3871.7	3851.1
67.5°	4434.4	4328.5	4230.8	4145.5	4067.1	4009.3	3972.2	3952.9
69°	4503.2	4371.2	4245.9	4134.5	4042.3	3977.7	3936.4	3917.1
70°	4495.0	4349.1	4211.6	4089.1	3988.7	3919.9	3880.0	3844.2
72.5°	4240.4	4107.0	3954.3	3820.8	3730.0	3664.0	3624.1	3604.8
75°	3618.6	3529.1	3419.0	3315.9	3249.8	3211.3	3161.8	3163.1
77.5°	2634.8	2637.6	2563.3	2457.3	2383.0	2369.3	2347.2	2325.2
80°	1634.5	1503.8	1418.5	1304.3	1220.4	1147.5	1115.8	1047.0
82.5°	754.0	588.9	456.8	345.3	265.5	207.8	181.6	148.6
85°	167.9	128.0	105.9	85.3	72.9	67.4	55.0	50.9
87.5°	23.4	20.6	19.3	17.9	15.1	11.0	8.3	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)