

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: P147360

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147360  
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-E05-LED-E1-5MQ  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (105) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

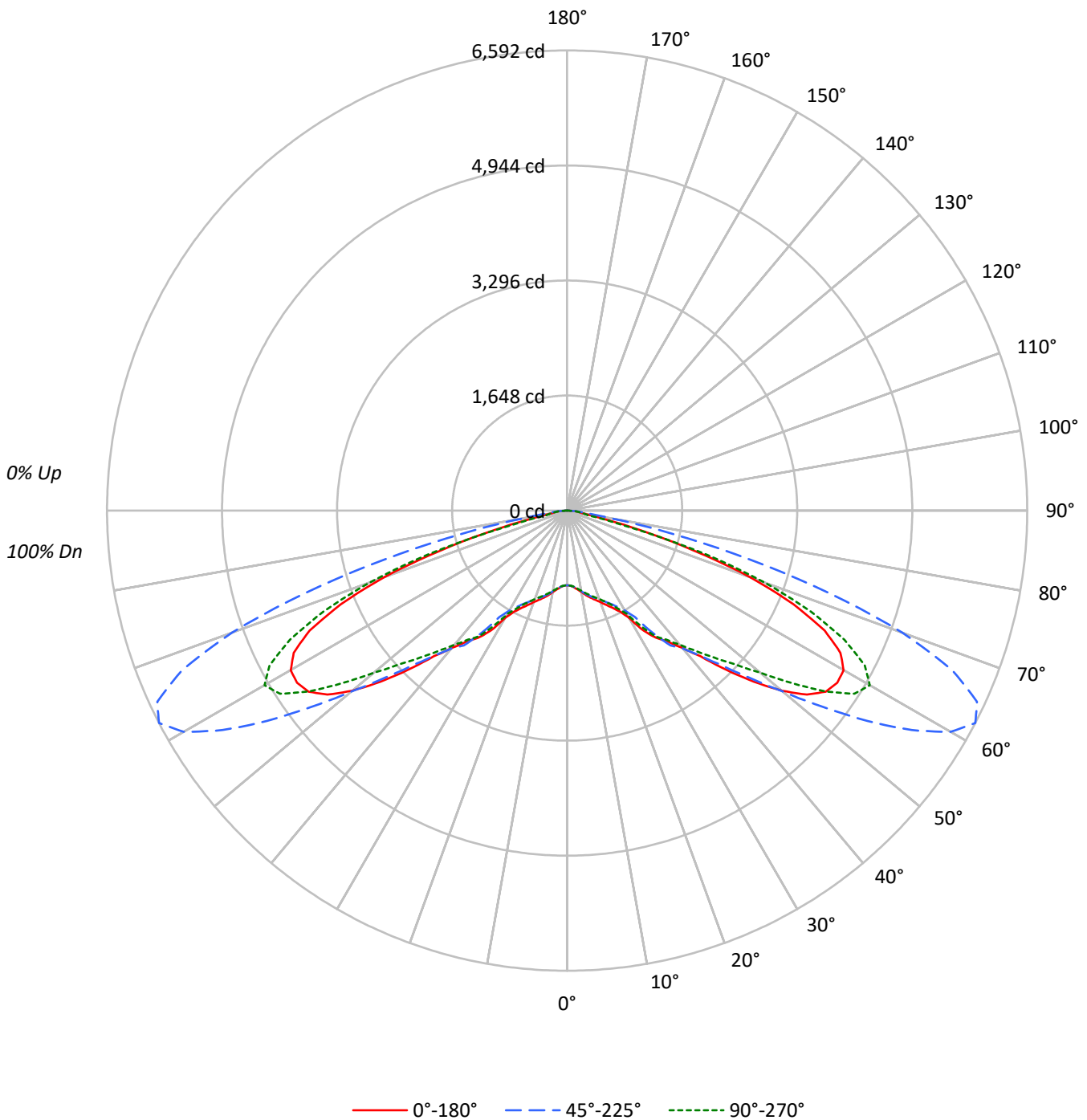
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16118.9 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
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



TEST NUMBER: P147360  
CATALOG NUMBER: TLM-E05-LED-E1-5MQ

### Luminous Intensity Polar Plot





TEST NUMBER: P147360

CATALOG NUMBER: TLM-E05-LED-E1-5MQ

**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°	13876	13876	13876
5°	14341	14265	14233
10°	15605	15440	15364
15°	17320	16995	16827
20°	19252	18791	18631
25°	21976	21082	21249
30°	26543	24758	25607
35°	35238	33946	34803
40°	43452	43579	42464
45°	59193	57512	54623
50°	80954	81376	72934
55°	102254	118798	102123
60°	118598	164441	129815
65°	124893	198795	134507
70°	105949	193789	113878
75°	53739	136040	46684
80°	17058	47237	17177
85°	18481	24552	18853



TEST NUMBER: P147360

CATALOG NUMBER: TLM-E05-LED-E1-5MQ

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.2	0.7
10°-20°	362.5	2.2
20°-30°	700.8	4.3
30°-40°	1356.9	8.4
40°-50°	2450.1	15.2
50°-60°	4260.4	26.4
60°-70°	4836.6	30.0
70°-80°	1875.1	11.6
80°-90°	169.2	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°	1170.5	7.3
0°-40°	2527.5	15.7
0°-60°	9237.9	57.3
0°-90°	16118.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16118.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1102	1100	1096	1095	1093	108
15°	1290	1281	1266	1257	1253	369
25°	1536	1505	1473	1475	1485	723
35°	2226	2183	2144	2182	2198	1391
45°	3228	3153	3136	3013	2978	2528
55°	4522	4740	5254	4676	4517	3982
65°	4070	4673	6478	5029	4383	3880
75°	1072	1500	2715	1420	932	1299
85°	124	178	165	178	127	122
90°	0	0	0	0	0	



TEST NUMBER: P147360

CATALOG NUMBER: TLM-E05-LED-E1-5MQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0
2.5°	1076.6	1080.0	1079.2	1077.5	1077.5	1077.5	1076.6	1074.2	1073.3	1075.0	1076.6
5°	1101.6	1101.6	1101.6	1101.6	1100.0	1100.0	1098.4	1096.6	1097.5	1095.8	1095.0
7.5°	1140.0	1137.5	1137.5	1136.7	1136.6	1135.0	1132.5	1129.2	1130.0	1129.2	1128.4
10°	1185.0	1185.8	1183.4	1185.8	1181.7	1180.8	1177.5	1175.8	1175.0	1172.5	1172.5
12.5°	1239.2	1236.6	1236.6	1235.0	1233.4	1231.6	1226.6	1225.8	1222.5	1220.8	1218.3
15°	1290.0	1289.2	1285.8	1282.5	1281.7	1280.0	1274.2	1270.8	1270.0	1265.8	1262.5
17.5°	1340.8	1339.2	1335.0	1333.4	1330.0	1327.5	1322.5	1317.5	1315.0	1313.4	1309.2
20°	1395.0	1393.3	1389.2	1385.8	1381.6	1378.4	1370.8	1366.6	1364.2	1361.6	1358.4
22.5°	1462.5	1459.2	1452.5	1446.6	1437.5	1434.2	1424.2	1418.4	1414.2	1410.8	1409.2
25°	1535.8	1536.6	1527.5	1520.0	1509.2	1500.0	1487.5	1480.8	1476.6	1473.3	1472.5
27.5°	1627.5	1628.3	1620.0	1609.2	1592.5	1582.5	1565.8	1557.5	1555.0	1551.7	1550.8
30°	1772.5	1765.0	1750.8	1733.4	1718.3	1696.7	1672.5	1664.2	1655.8	1653.3	1653.4
32.5°	2039.2	2035.0	2023.4	1980.0	1960.0	1915.0	1872.5	1848.3	1820.8	1807.5	1799.2
35°	2225.8	2224.2	2215.0	2200.0	2187.5	2178.4	2153.4	2149.2	2144.2	2144.2	2150.8
37.5°	2363.3	2353.4	2351.7	2354.2	2350.8	2352.5	2372.5	2400.0	2423.3	2435.0	2433.4
40°	2566.7	2552.5	2560.8	2555.0	2547.5	2545.8	2552.5	2563.4	2574.2	2574.2	2571.7
42.5°	2832.5	2839.2	2842.5	2818.3	2802.5	2798.4	2814.2	2810.8	2821.6	2817.5	2806.7
45°	3227.5	3223.3	3217.5	3188.4	3163.4	3143.3	3147.5	3141.6	3142.5	3135.8	3127.5
47.5°	3625.8	3640.0	3615.8	3601.6	3573.3	3559.2	3570.8	3560.8	3580.0	3545.0	3528.4
50°	4012.5	4022.5	4014.2	3994.2	3994.2	4014.2	4028.4	4046.7	4073.4	4033.4	3973.4
52.5°	4329.2	4337.5	4350.0	4366.6	4407.5	4450.0	4510.0	4574.2	4625.0	4617.5	4549.2
55°	4522.5	4532.5	4553.4	4610.8	4684.2	4795.8	4931.7	5080.8	5197.5	5254.2	5204.2
57.5°	4587.5	4595.0	4651.6	4720.8	4835.0	5000.8	5228.4	5485.8	5710.0	5852.5	5830.0
60°	4572.5	4572.5	4630.0	4725.0	4885.0	5105.0	5426.7	5783.4	6126.6	6340.0	6308.3
62.5°	4415.0	4423.4	4505.8	4620.0	4813.4	5076.6	5460.0	5915.8	6326.7	6591.6	6565.8
65°	4070.0	4075.8	4165.0	4300.8	4516.7	4828.4	5247.5	5752.5	6223.4	6478.3	6430.0
67.5°	3512.5	3518.3	3590.8	3744.2	3972.5	4298.4	4750.8	5306.6	5767.5	5969.2	5824.2
70°	2794.2	2810.9	2857.5	3020.0	3193.4	3512.5	3929.2	4485.0	4920.0	5110.8	4950.8
72.5°	1904.2	1946.7	2003.3	2147.5	2313.4	2578.3	2910.0	3378.3	3727.5	3948.4	3805.8
75°	1072.5	1132.5	1150.0	1259.2	1395.8	1605.0	1847.5	2183.4	2535.9	2715.0	2543.4
77.5°	463.4	512.5	534.2	585.0	691.6	779.2	926.7	1153.4	1425.8	1551.6	1345.8
80°	228.4	240.0	249.2	265.0	295.0	323.4	393.3	492.5	604.2	632.5	503.3
82.5°	176.6	185.0	200.8	213.3	220.8	228.3	235.0	248.4	259.2	265.0	250.0
85°	124.2	135.0	152.5	166.7	175.0	180.8	186.7	190.9	180.9	165.0	173.4
87.5°	32.5	42.5	59.2	64.2	72.5	76.6	75.0	77.5	70.0	50.8	56.6
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: P147360

CATALOG NUMBER: TLM-E05-LED-E1-5MQ

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0	1070.0
2.5°	1075.8	1075.0	1075.8	1075.8	1075.8	1075.0	1075.0	1075.0
5°	1095.0	1095.0	1095.8	1094.2	1094.2	1095.0	1094.2	1093.3
7.5°	1127.5	1126.6	1126.7	1125.8	1126.6	1125.8	1125.8	1125.0
10°	1170.8	1169.2	1170.0	1167.5	1167.5	1166.6	1166.6	1166.7
12.5°	1217.5	1215.0	1215.8	1213.4	1209.2	1210.0	1210.8	1210.0
15°	1262.5	1260.0	1257.5	1255.8	1253.4	1254.2	1254.2	1253.3
17.5°	1308.4	1303.4	1302.5	1300.0	1299.2	1299.2	1299.2	1300.0
20°	1355.8	1352.5	1351.6	1349.2	1348.4	1350.8	1351.6	1350.0
22.5°	1406.6	1405.0	1406.6	1405.0	1407.5	1409.2	1410.0	1408.3
25°	1470.8	1469.2	1471.6	1477.5	1480.8	1482.5	1486.6	1485.0
27.5°	1553.4	1551.6	1557.5	1565.8	1570.8	1579.2	1583.3	1585.0
30°	1660.0	1667.5	1670.8	1687.5	1690.8	1704.2	1704.2	1710.0
32.5°	1815.0	1829.2	1854.2	1880.0	1915.8	1941.6	1941.6	1955.0
35°	2155.0	2160.8	2180.0	2184.2	2191.6	2200.0	2191.6	2198.3
37.5°	2415.8	2390.0	2371.6	2345.8	2330.0	2330.0	2331.6	2330.0
40°	2549.2	2539.2	2530.8	2509.2	2505.8	2505.0	2505.0	2508.3
42.5°	2787.5	2763.3	2750.0	2731.7	2725.8	2724.2	2723.4	2725.0
45°	3097.5	3058.3	3022.5	3004.1	2988.3	2973.4	2978.4	2978.3
47.5°	3458.4	3397.5	3339.2	3307.5	3280.0	3267.5	3259.2	3256.7
50°	3897.5	3812.5	3737.5	3678.3	3638.4	3637.5	3641.6	3615.0
52.5°	4435.8	4301.6	4208.4	4128.4	4090.8	4086.6	4073.4	4058.3
55°	5032.5	4873.4	4719.2	4633.4	4584.2	4557.5	4541.6	4516.7
57.5°	5647.5	5433.4	5211.6	5074.2	4987.5	4927.5	4895.8	4881.7
60°	6121.6	5829.2	5536.6	5315.8	5171.7	5082.5	5027.5	5005.0
62.5°	6308.4	5911.7	5536.6	5246.7	5038.4	4915.0	4840.8	4808.3
65°	6085.8	5615.8	5189.2	4869.2	4636.6	4499.2	4418.4	4383.3
67.5°	5464.2	5049.2	4585.0	4266.6	4027.5	3891.6	3804.2	3778.3
70°	4580.8	4156.7	3713.4	3429.2	3215.8	3105.0	3014.1	3003.3
72.5°	3442.5	3076.7	2696.6	2461.6	2290.0	2106.7	2060.0	2083.3
75°	2206.7	1864.2	1525.8	1314.2	1157.5	982.5	915.0	931.7
77.5°	1045.0	809.2	584.2	451.7	379.2	324.2	310.0	301.7
80°	387.5	314.2	277.5	263.4	253.3	244.2	237.5	230.0
82.5°	250.8	245.0	237.5	235.0	227.5	215.8	194.2	185.0
85°	187.5	187.5	177.5	178.3	172.5	157.5	137.5	126.7
87.5°	55.0	49.2	45.0	41.7	40.8	36.6	26.7	23.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)