

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: P147840

Luminaire Tested: **TLM-E01-LED-E1-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147840
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-E01-LED-E1-5WQ
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3183.8 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 3.9 / 3.92 / 3.98
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

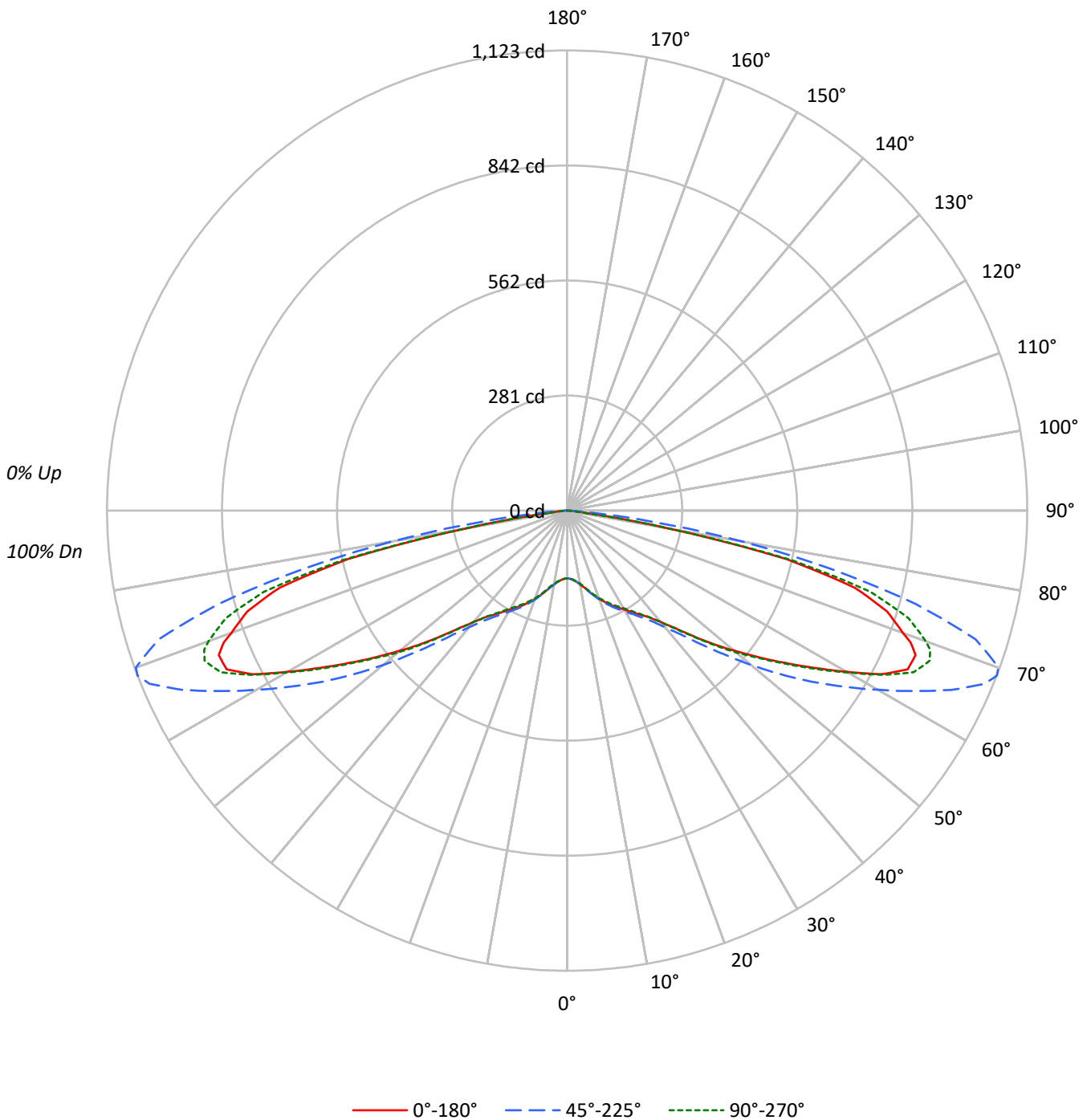
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P147840

CATALOG NUMBER: TLM-E01-LED-E1-5WQ

Luminous Intensity Polar Plot





TEST NUMBER: P147840

CATALOG NUMBER: TLM-E01-LED-E1-5WQ

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°	10466	10466	10466
5°	10805	10805	10761
10°	11766	11746	11637
15°	13353	13418	13222
20°	15450	15585	15316
25°	17794	18073	17536
30°	20376	20837	20128
35°	23962	24603	23753
40°	29285	30640	29285
45°	38683	41190	38835
50°	52306	57723	53025
55°	71500	80331	71897
60°	99623	110767	100003
65°	137386	155065	139783
70°	161431	207398	172409
75°	177608	215600	187467
80°	89808	157155	92506
85°	11624	42645	8936



TEST NUMBER: P147840

CATALOG NUMBER: TLM-E01-LED-E1-5WQ

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.6	0.5
10°-20°	58.6	1.8
20°-30°	118.7	3.7
30°-40°	199.0	6.3
40°-50°	351.0	11.0
50°-60°	619.1	19.4
60°-70°	945.1	29.7
70°-80°	789.8	24.8
80°-90°	85.8	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°	193.9	6.1
0°-40°	393.0	12.3
0°-60°	1363.1	42.8
0°-90°	3183.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3183.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	165	165	165	165	165	
5°	170	170	170	170	169	17
15°	204	205	205	203	202	59
25°	255	256	259	254	251	118
35°	310	312	318	312	307	197
45°	432	442	460	446	434	339
55°	648	678	728	684	651	587
65°	917	966	1035	974	933	878
75°	726	767	881	816	766	699
85°	16	27	59	23	12	53
90°	0	0	0	0	0	



TEST NUMBER: P147840

CATALOG NUMBER: TLM-E01-LED-E1-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3
2.5°	166.7	167.0	166.7	166.7	166.7	166.7	166.7	166.3	166.3	166.3	166.7
5°	170.0	170.3	170.0	170.3	170.3	170.3	170.3	170.0	170.0	170.0	170.0
7.5°	175.3	175.3	175.3	175.7	175.3	175.3	175.7	175.3	175.3	175.3	175.3
10°	183.0	182.7	182.7	182.7	182.7	182.7	183.0	183.0	183.0	182.7	182.7
12.5°	192.3	192.0	192.3	192.3	192.7	192.7	192.7	192.7	192.7	192.7	192.3
15°	203.7	203.7	203.7	204.0	204.7	204.7	204.3	204.7	204.7	204.7	204.7
17.5°	216.3	217.0	216.3	216.7	217.0	216.7	217.3	217.7	218.0	217.7	216.7
20°	229.3	229.7	229.7	229.7	229.7	230.3	230.7	230.7	231.7	231.3	231.0
22.5°	241.7	242.3	242.3	242.7	242.7	243.7	243.7	243.7	244.3	245.0	244.3
25°	254.7	254.3	254.3	255.0	255.3	256.7	256.7	257.3	258.3	258.7	258.0
27.5°	266.3	266.0	266.0	267.0	267.3	269.0	269.0	270.3	271.0	271.3	270.7
30°	278.7	278.7	278.3	279.3	280.3	281.7	282.3	283.7	284.7	285.0	284.3
32.5°	293.3	292.7	293.0	293.7	294.3	295.7	296.7	298.3	299.7	300.0	299.3
35°	310.0	309.0	309.3	310.0	311.0	313.0	314.7	315.7	317.7	318.3	317.0
37.5°	328.3	328.7	328.3	330.0	331.7	334.0	336.0	337.3	339.3	340.3	339.3
40°	354.3	353.3	354.3	356.0	358.7	361.7	365.7	366.7	368.7	370.7	368.3
42.5°	388.0	387.3	389.7	391.0	394.0	397.3	402.3	405.0	408.0	409.3	407.3
45°	432.0	432.0	434.7	435.0	439.7	444.0	451.0	454.3	460.0	460.0	460.0
47.5°	480.7	482.7	484.3	487.7	491.0	499.0	506.0	513.3	518.7	519.3	518.3
50°	531.0	533.0	538.0	542.7	550.0	560.0	567.7	577.3	582.0	586.0	584.7
52.5°	586.7	587.0	593.0	599.0	609.7	620.7	633.0	643.0	651.3	655.0	652.0
55°	647.7	648.3	653.7	660.0	672.0	684.7	700.0	710.3	721.0	727.7	722.7
57.5°	713.7	714.0	719.3	727.0	741.3	754.0	768.7	783.3	793.3	799.3	796.0
60°	786.7	788.3	792.3	802.0	815.7	829.0	843.7	856.7	868.3	874.7	871.3
62.5°	864.7	866.3	872.0	879.7	891.7	906.3	920.3	937.0	946.7	953.7	948.7
65°	917.0	920.0	929.0	939.3	957.0	976.0	992.3	1015.0	1026.7	1035.0	1030.3
67.5°	920.3	922.0	933.0	948.7	972.3	1001.0	1034.3	1069.7	1092.7	1103.7	1095.7
69°	897.7	900.0	910.7	928.3	954.7	988.0	1027.7	1071.7	1107.0	1123.3	1115.7
70°	872.0	877.0	888.7	908.0	933.7	968.7	1009.7	1056.7	1098.0	1120.3	1114.7
72.5°	818.0	819.3	827.0	842.3	862.0	891.0	929.7	974.0	1013.3	1045.3	1050.0
75°	726.0	730.3	736.0	746.3	756.3	777.3	803.3	833.7	856.7	881.3	882.3
77.5°	548.7	561.7	566.0	568.3	572.7	589.3	612.0	638.3	657.3	661.3	660.7
80°	246.3	263.7	267.7	286.7	298.3	326.0	360.7	401.0	428.0	431.0	423.7
82.5°	48.3	51.7	60.3	75.3	102.7	119.0	141.7	170.0	196.0	211.0	202.0
85°	16.0	17.0	19.7	21.7	25.0	28.3	34.3	42.7	53.0	58.7	52.3
87.5°	6.3	6.3	7.3	8.0	8.7	8.7	8.7	8.0	7.7	6.3	5.7
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: P147840

CATALOG NUMBER: TLM-E01-LED-E1-5WQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	165.3	165.3	165.3	165.3	165.3	165.3	165.3	165.3
2.5°	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3
5°	170.0	169.7	169.7	169.3	169.3	169.3	169.3	169.3
7.5°	175.0	174.7	174.3	174.7	174.3	174.3	174.3	174.3
10°	182.7	182.0	181.7	181.3	181.3	181.3	181.0	181.0
12.5°	191.7	191.7	191.3	191.0	190.3	190.7	190.3	189.7
15°	204.0	203.3	203.0	202.7	202.0	202.0	202.0	201.7
17.5°	216.3	215.7	215.7	214.7	214.3	214.3	214.3	214.7
20°	230.0	229.0	228.3	227.7	227.0	227.3	226.7	227.3
22.5°	243.7	242.3	241.7	240.7	239.7	239.7	239.3	238.7
25°	257.0	255.3	254.7	253.7	252.3	252.3	251.7	251.0
27.5°	269.7	268.0	267.3	265.3	264.0	263.7	263.0	262.7
30°	283.7	281.7	280.7	278.7	276.7	276.3	275.3	275.3
32.5°	298.3	296.3	295.7	292.7	291.0	291.0	290.3	289.7
35°	316.7	313.7	313.0	310.0	307.7	307.7	307.0	307.3
37.5°	338.3	336.0	333.7	331.3	328.7	328.3	327.7	327.0
40°	367.3	364.7	362.0	358.7	356.3	355.7	354.7	354.3
42.5°	406.0	403.3	398.0	395.3	393.0	391.0	390.7	390.3
45°	455.3	452.0	448.3	443.3	440.3	436.0	435.3	433.7
47.5°	514.7	508.3	502.0	497.7	493.0	488.0	487.0	484.3
50°	577.7	572.7	562.0	555.0	547.7	542.7	539.3	538.3
52.5°	645.3	636.0	625.3	616.0	605.3	598.7	592.7	591.0
55°	716.0	702.7	689.3	678.3	667.7	659.7	654.0	651.3
57.5°	786.7	772.0	757.3	745.3	736.3	726.0	720.3	719.0
60°	860.3	846.3	831.3	819.3	808.3	799.3	796.0	789.7
62.5°	938.3	923.7	909.7	898.0	884.0	877.7	872.0	868.3
65°	1015.0	998.0	980.3	968.0	954.0	945.0	938.0	933.0
67.5°	1074.3	1048.7	1025.0	1004.3	985.3	971.3	962.3	957.7
69°	1091.0	1059.0	1028.7	1001.7	979.3	963.7	953.7	949.0
70°	1089.0	1053.7	1020.3	990.7	966.3	949.7	940.0	931.3
72.5°	1027.3	995.0	958.0	925.7	903.7	887.7	878.0	873.3
75°	876.7	855.0	828.3	803.3	787.3	778.0	766.0	766.3
77.5°	638.3	639.0	621.0	595.3	577.3	574.0	568.7	563.3
80°	396.0	364.3	343.7	316.0	295.7	278.0	270.3	253.7
82.5°	182.7	142.7	110.7	83.7	64.3	50.3	44.0	36.0
85°	40.7	31.0	25.7	20.7	17.7	16.3	13.3	12.3
87.5°	5.7	5.0	4.7	4.3	3.7	2.7	2.0	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)