

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P127938

Luminaire Tested: **LSM45W8027D010TEP**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P127938  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24508)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSM45W8027D010TEP  
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE  
Light Source: 80 CRI, 2700K CCT LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4153.0 lumens  
Efficiency: N/A  
Efficacy: 93.0 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 1.43 / 1.73  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
CIE Type: Direct

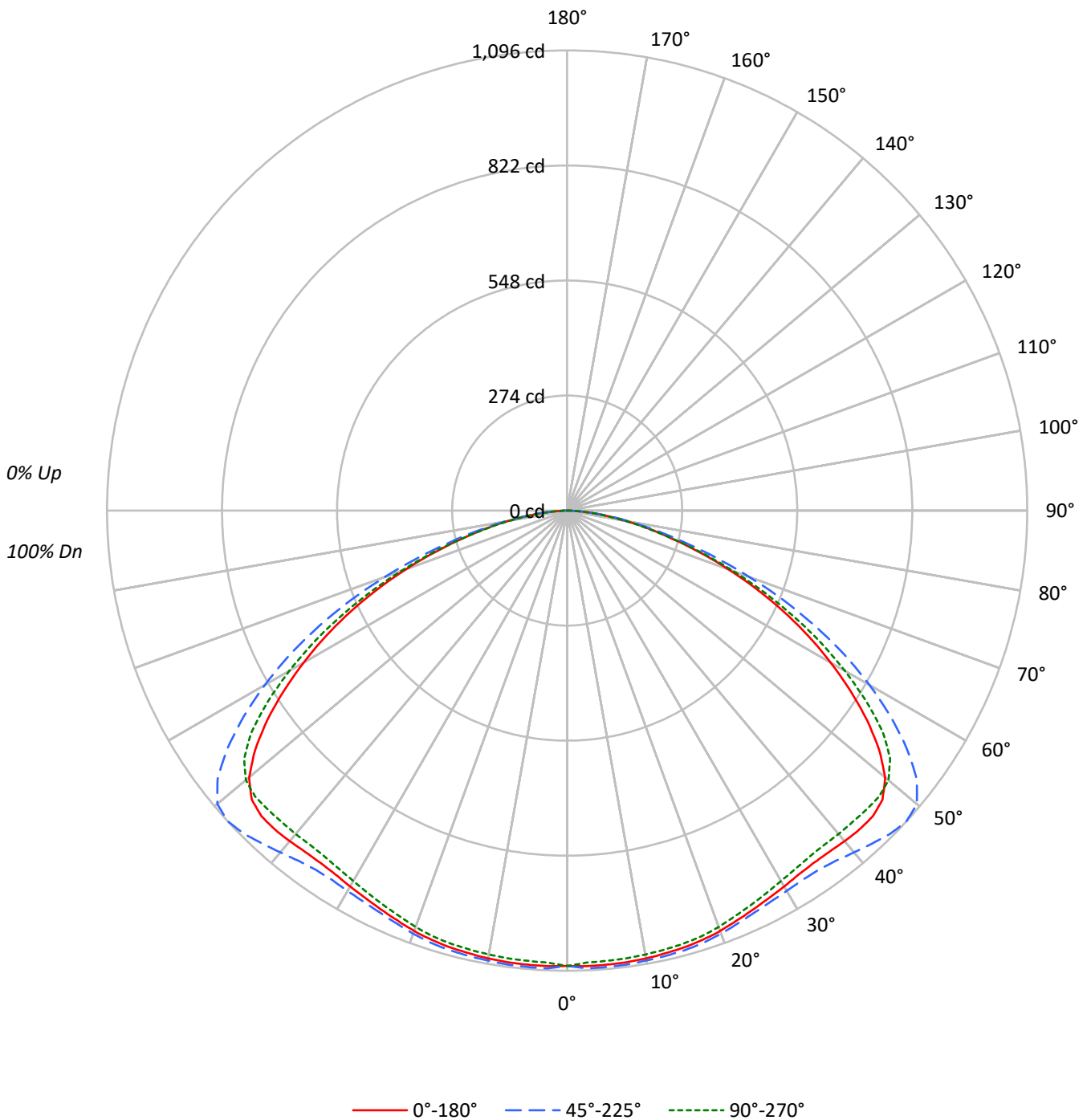
Input Watts (W): 44.68  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	80	68	58	51	78	66	58	51	64	56	50	61	55	49	59	53	49	47
5	73	60	50	43	71	59	50	43	57	49	43	54	48	42	53	47	42	39
6	67	53	44	37	65	52	43	37	51	43	37	49	42	36	47	41	36	34
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	33	28	26
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	22	34	27	22	33	27	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11743	11743	11743
5°	11801	11859	11702
10°	11911	11963	11804
15°	12075	12150	11974
20°	12281	12357	12163
25°	12525	12618	12382
30°	12928	13078	12739
35°	13539	13802	13301
40°	14530	15022	14215
45°	15769	16671	15427
50°	16658	18319	16830
55°	16478	18645	17318
60°	15712	18017	16546
65°	14569	16742	15217
70°	12921	14577	13323
75°	10840	11895	10966
80°	8849	9448	8662
85°	6349	6722	6200



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.3	2.5
10°-20°	304.3	7.3
20°-30°	484.5	11.7
30°-40°	647.7	15.6
40°-50°	811.3	19.5
50°-60°	833.0	20.1
60°-70°	608.7	14.7
70°-80°	295.5	7.1
80°-90°	64.7	1.6
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°	892.1	21.5
0°-40°	1539.9	37.1
0°-60°	3184.1	76.7
0°-90°	4153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4153.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1086	1082	1091	1078	1076	104
15°	1077	1075	1084	1071	1068	305
25°	1048	1047	1056	1042	1036	485
35°	1024	1030	1044	1022	1006	645
45°	1030	1057	1089	1045	1007	791
55°	873	920	988	960	917	775
65°	569	605	653	629	594	562
75°	259	273	284	273	262	280
85°	51	53	54	52	50	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.4	1084.4	1084.4	1084.4	1084.4
2.5°	1086.2	1082.6	1091.6	1078.3	1077.7
5°	1085.6	1082.0	1091.0	1077.7	1076.5
7.5°	1085.0	1082.0	1090.4	1077.1	1075.9
10°	1083.2	1079.5	1088.0	1075.3	1073.5
12.5°	1080.1	1077.1	1086.2	1072.9	1071.1
15°	1077.1	1074.7	1083.8	1071.1	1068.1
17.5°	1072.3	1069.9	1079.5	1066.3	1063.3
20°	1065.7	1063.3	1072.3	1059.7	1055.5
22.5°	1056.7	1054.3	1063.9	1050.7	1045.3
25°	1048.3	1047.1	1056.1	1042.3	1036.3
27.5°	1040.5	1040.5	1050.1	1035.1	1027.3
30°	1033.9	1035.1	1045.9	1029.1	1018.8
32.5°	1027.3	1030.9	1042.9	1023.6	1011.6
35°	1024.2	1029.7	1044.1	1021.8	1006.2
37.5°	1024.8	1034.5	1051.3	1024.2	1004.4
40°	1027.9	1042.3	1062.7	1030.3	1005.6
42.5°	1030.3	1050.1	1075.3	1037.5	1006.2
45°	1029.7	1056.7	1088.6	1045.3	1007.4
47.5°	1018.8	1053.7	1095.8	1051.3	1008.0
50°	988.8	1030.9	1087.4	1046.5	999.0
52.5°	937.1	984.0	1049.5	1016.4	969.5
55°	872.8	920.3	987.6	960.5	917.3
57.5°	800.6	848.7	913.6	887.2	844.5
60°	725.5	770.6	831.9	805.5	764.0
62.5°	648.0	689.4	745.3	720.1	681.0
65°	568.6	605.3	653.4	628.7	593.9
67.5°	488.1	518.7	557.2	535.6	506.1
70°	408.1	432.2	460.4	443.0	420.8
72.5°	330.0	352.2	369.1	354.0	338.4
75°	259.1	272.9	284.3	272.9	262.1
77.5°	198.4	206.2	212.2	203.2	194.8
80°	141.9	149.1	151.5	144.9	138.9
82.5°	92.6	97.4	99.2	94.4	90.8
85°	51.1	52.9	54.1	51.7	49.9
87.5°	16.2	16.8	18.0	16.2	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)