

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: P127945

Luminaire Tested: **LSM45W9040D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P127945
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: LSM45W9040D010TEP
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE
Light Source: 90 CRI, 4000K CCT LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

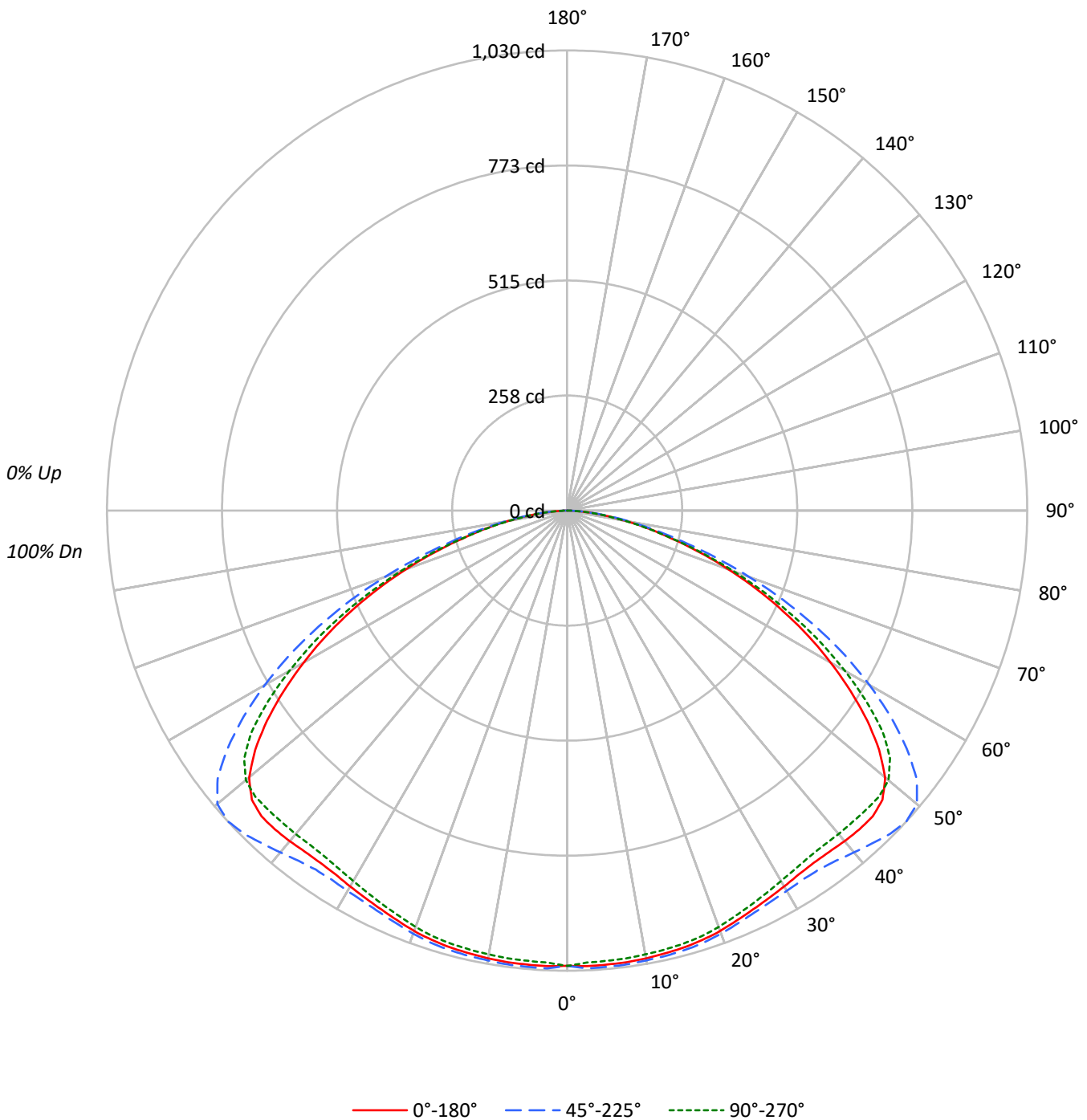
Lumens per Lamp: N/A
Luminaire Lumens: 3902.6 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.43 / 1.73
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56					56			
4	80	68	58	51	78	66	58	51	64	56	50	61	55	49	59	53	49	47					47			
5	73	60	50	43	71	59	50	43	57	49	43	54	48	42	53	47	42	39					39			
6	67	53	44	37	65	52	43	37	51	43	37	49	42	36	47	41	36	34					34			
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29					29			
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	33	28	26					26			
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23					23			
10	50	36	28	23	49	36	28	23	35	28	22	34	27	22	33	27	22	20					20			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11034	11034	11034
5°	11089	11144	10996
10°	11193	11242	11092
15°	11347	11417	11252
20°	11541	11612	11430
25°	11770	11857	11635
30°	12148	12289	11971
35°	12724	12970	12500
40°	13654	14117	13358
45°	14818	15665	14498
50°	15654	17214	15815
55°	15485	17520	16274
60°	14766	16930	15548
65°	13690	15732	14300
70°	12142	13700	12519
75°	10184	11179	10305
80°	8313	8874	8138
85°	5964	6312	5827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	2.5
10°-20°	285.9	7.3
20°-30°	455.3	11.7
30°-40°	608.7	15.6
40°-50°	762.4	19.5
50°-60°	782.8	20.1
60°-70°	572.0	14.7
70°-80°	277.7	7.1
80°-90°	60.8	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°	838.3	21.5
0°-40°	1447.0	37.1
0°-60°	2992.2	76.7
0°-90°	3902.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3902.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1020	1017	1025	1013	1012	97
15°	1012	1010	1018	1007	1004	286
25°	985	984	992	979	974	456
35°	962	968	981	960	946	606
45°	968	993	1023	982	947	743
55°	820	865	928	903	862	729
65°	534	569	614	591	558	528
75°	243	256	267	256	246	263
85°	48	50	51	49	47	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1020.7	1017.3	1025.8	1013.3	1012.8
5°	1020.1	1016.7	1025.2	1012.8	1011.6
7.5°	1019.5	1016.7	1024.6	1012.2	1011.1
10°	1017.9	1014.5	1022.4	1010.5	1008.8
12.5°	1015.0	1012.2	1020.7	1008.3	1006.6
15°	1012.2	1009.9	1018.4	1006.6	1003.7
17.5°	1007.7	1005.4	1014.5	1002.0	999.2
20°	1001.5	999.2	1007.7	995.8	991.9
22.5°	993.0	990.7	999.8	987.4	982.3
25°	985.1	984.0	992.4	979.4	973.8
27.5°	977.8	977.8	986.8	972.7	965.3
30°	971.5	972.7	982.8	967.0	957.4
32.5°	965.3	968.7	980.0	961.9	950.6
35°	962.5	967.6	981.1	960.2	945.6
37.5°	963.1	972.1	987.9	962.5	943.9
40°	965.9	979.4	998.7	968.1	945.0
42.5°	968.1	986.8	1010.5	974.9	945.6
45°	967.6	993.0	1022.9	982.3	946.7
47.5°	957.4	990.2	1029.7	987.9	947.2
50°	929.2	968.7	1021.8	983.4	938.8
52.5°	880.6	924.7	986.2	955.2	911.1
55°	820.2	864.8	928.0	902.6	862.0
57.5°	752.4	797.6	858.6	833.7	793.6
60°	681.8	724.1	781.7	756.9	717.9
62.5°	608.9	647.9	700.4	676.7	640.0
65°	534.3	568.8	614.0	590.8	558.1
67.5°	458.7	487.5	523.6	503.3	475.6
70°	383.5	406.1	432.7	416.3	395.4
72.5°	310.1	331.0	346.8	332.7	318.0
75°	243.4	256.4	267.2	256.4	246.3
77.5°	186.4	193.7	199.4	190.9	183.0
80°	133.3	140.1	142.3	136.1	130.5
82.5°	87.0	91.5	93.2	88.7	85.3
85°	48.0	49.7	50.8	48.6	46.9
87.5°	15.3	15.8	16.9	15.3	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)