

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: NEO-RAY

Report Number: P242250

Luminaire Tested: **S122DR-S290D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-S290D927-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 915.2 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

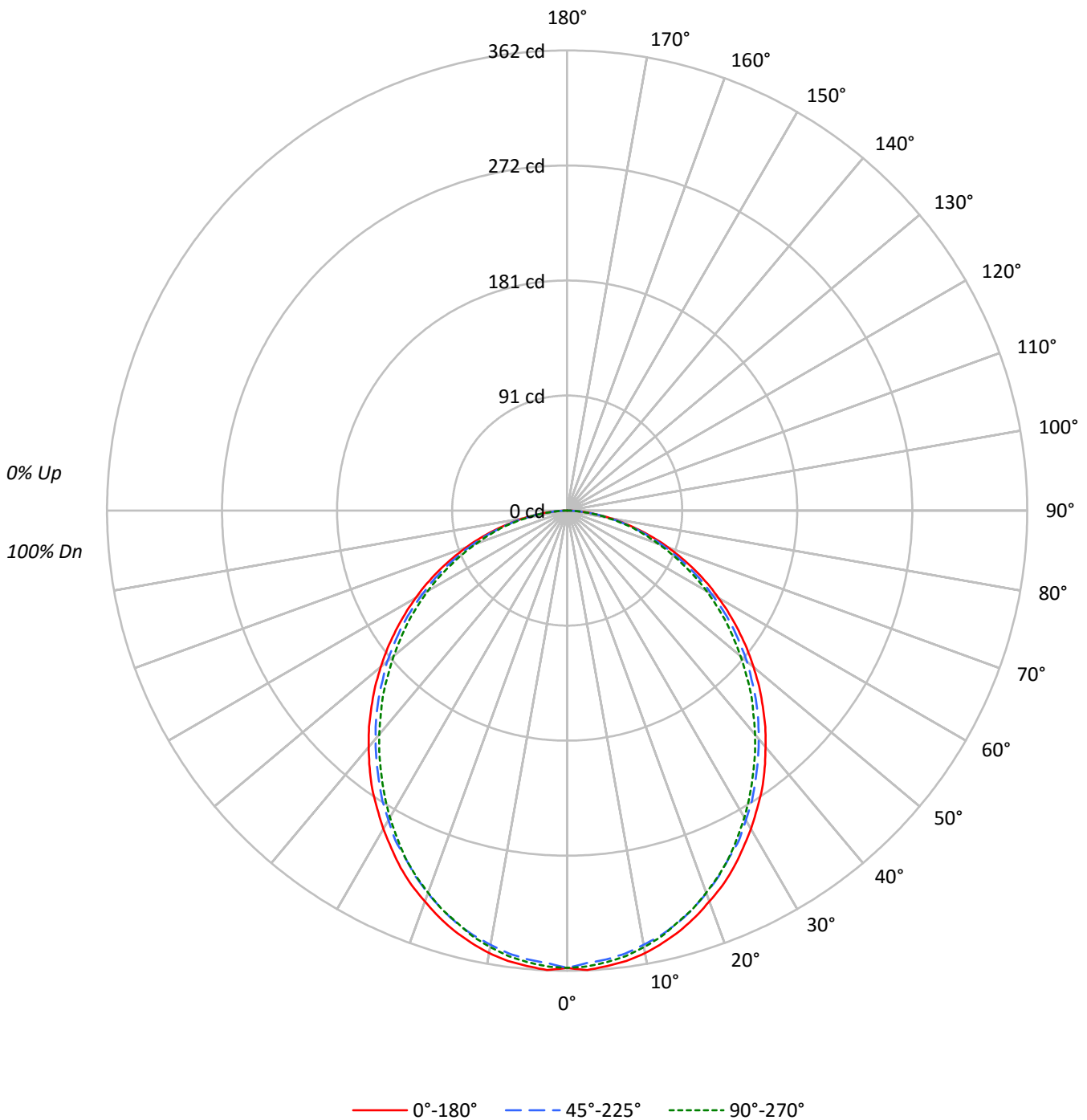
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51					51			
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6851	6851	6851
5°	6878	6778	6818
10°	6837	6710	6744
15°	6752	6624	6616
20°	6632	6493	6484
25°	6513	6332	6332
30°	6361	6185	6132
35°	6218	6009	5920
40°	6037	5831	5719
45°	5862	5657	5517
50°	5669	5473	5278
55°	5466	5260	5064
60°	5246	5006	4823
65°	5003	4755	4539
70°	4700	4450	4238
75°	4276	4099	3996
80°	3795	3686	3488
85°	3103	2950	2644



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	3.7
10°-20°	95.3	10.4
20°-30°	140.0	15.3
30°-40°	162.6	17.8
40°-50°	162.4	17.7
50°-60°	141.6	15.5
60°-70°	104.7	11.4
70°-80°	59.2	6.5
80°-90°	15.6	1.7
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°	269.1	29.4
0°-40°	431.7	47.2
0°-60°	735.7	80.4
0°-90°	915.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	360	360	360	360	360	
5°	360	358	354	357	357	34
15°	342	340	336	337	336	96
25°	310	307	301	302	301	143
35°	267	264	258	256	255	167
45°	218	215	210	206	205	168
55°	165	163	158	154	152	147
65°	111	109	106	102	101	110
75°	58	57	56	54	54	62
85°	14	14	14	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	359.7	359.7	359.7	359.7	359.7
2.5°	361.8	360.1	356.3	359.7	359.0
5°	359.7	358.3	354.5	357.3	356.6
7.5°	357.3	355.2	351.4	354.2	353.5
10°	353.5	351.1	346.9	349.7	348.7
12.5°	348.3	346.2	342.1	343.8	343.1
15°	342.4	340.4	335.9	337.2	335.5
17.5°	335.2	333.1	328.6	330.3	328.6
20°	327.2	325.1	320.3	321.3	319.9
22.5°	319.3	316.1	311.6	311.6	311.0
25°	309.9	307.1	301.3	302.0	301.3
27.5°	299.5	297.1	292.6	291.6	289.9
30°	289.2	286.4	281.2	280.2	278.8
32.5°	278.1	276.0	270.5	268.4	267.0
35°	267.4	263.9	258.4	256.3	254.6
37.5°	255.3	252.2	246.6	244.2	242.5
40°	242.8	240.0	234.5	231.4	230.0
42.5°	230.7	227.9	222.4	218.9	216.9
45°	217.6	215.1	210.0	206.1	204.8
47.5°	204.8	202.3	196.8	193.0	190.9
50°	191.3	189.5	184.7	179.9	178.1
52.5°	178.1	175.7	171.2	167.4	165.0
55°	164.6	162.6	158.4	154.3	152.5
57.5°	151.2	149.4	144.9	140.8	139.4
60°	137.7	136.3	131.4	127.6	126.6
62.5°	124.5	122.1	118.6	115.2	113.8
65°	111.0	109.0	105.5	102.4	100.7
67.5°	97.2	95.5	92.4	89.9	88.5
70°	84.4	83.0	79.9	77.5	76.1
72.5°	71.3	69.9	68.1	65.7	64.7
75°	58.1	57.4	55.7	53.6	54.3
77.5°	46.3	45.0	44.3	43.2	42.2
80°	34.6	34.2	33.6	32.5	31.8
82.5°	23.5	23.5	23.2	21.8	21.8
85°	14.2	13.8	13.5	12.5	12.1
87.5°	6.2	5.5	4.8	3.8	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)