

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: P243110

Luminaire Tested: **S122DR-H290D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243110
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-48)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DR-H290D927-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 915.6 lumens
Efficiency: N/A
Efficacy: 81.7 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

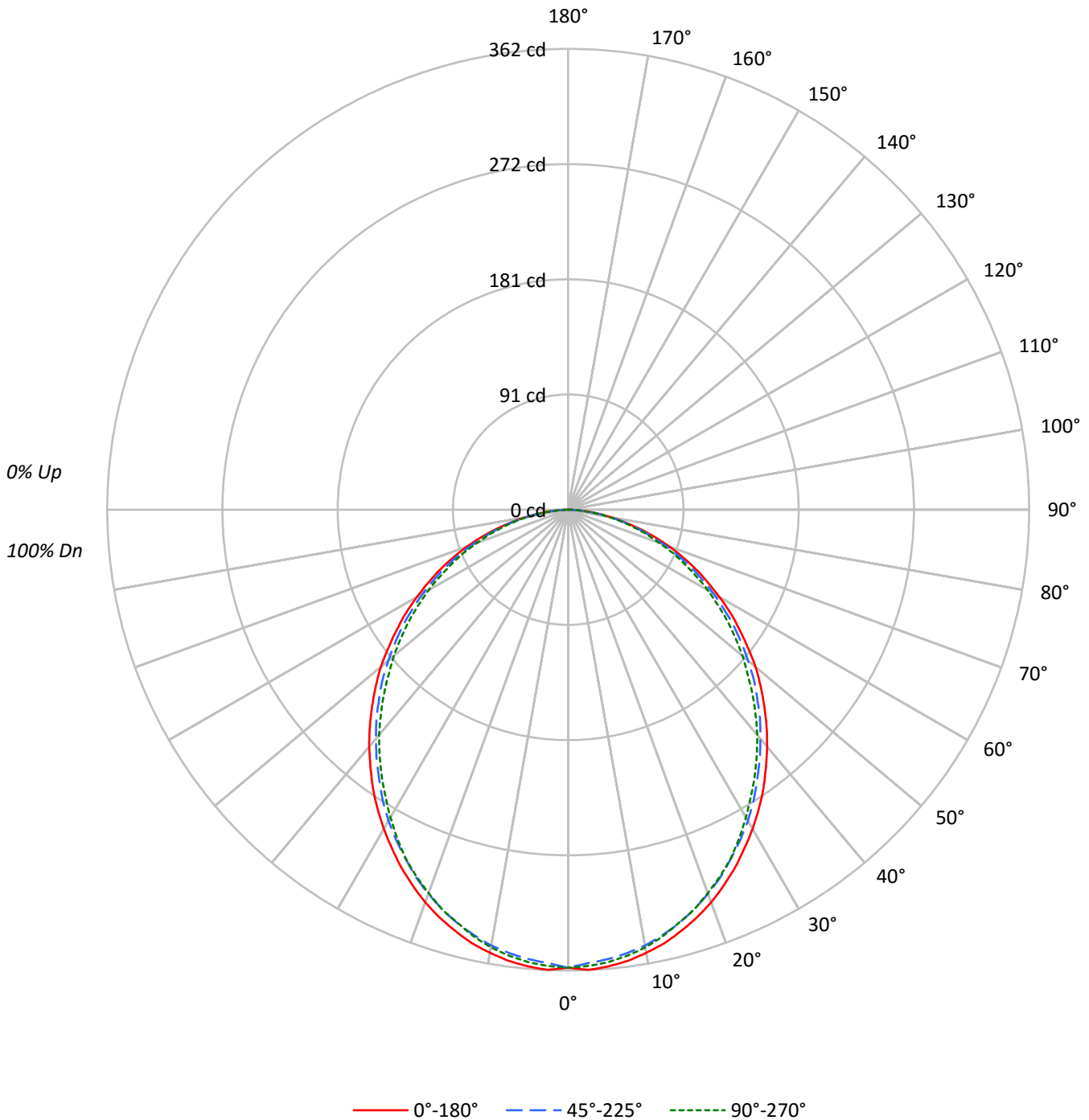
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6853	6853	6853
5°	6887	6778	6822
10°	6837	6723	6754
15°	6756	6632	6624
20°	6655	6507	6495
25°	6517	6355	6349
30°	6367	6207	6141
35°	6216	6016	5939
40°	6045	5838	5746
45°	5862	5654	5511
50°	5690	5464	5295
55°	5453	5264	5068
60°	5219	5017	4827
65°	4994	4755	4543
70°	4689	4450	4227
75°	4268	4099	3908
80°	3708	3598	3455
85°	3191	2819	2601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	3.7
10°-20°	95.4	10.4
20°-30°	140.2	15.3
30°-40°	162.8	17.8
40°-50°	162.6	17.8
50°-60°	141.6	15.5
60°-70°	104.7	11.4
70°-80°	59.0	6.4
80°-90°	15.4	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°	269.5	29.4
0°-40°	432.3	47.2
0°-60°	736.4	80.4
0°-90°	915.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	360	360	360	360	360	
5°	360	358	354	358	357	34
15°	343	341	336	338	336	97
25°	310	307	302	302	302	143
35°	267	264	259	256	255	167
45°	218	215	210	207	205	168
55°	164	163	158	154	153	147
65°	111	109	106	102	101	110
75°	58	58	56	54	53	62
85°	15	14	13	12	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	359.8	359.8	359.8	359.8	359.8
2.5°	361.8	360.2	356.5	359.5	358.8
5°	360.2	358.5	354.5	357.5	356.8
7.5°	357.5	355.8	351.5	354.5	353.5
10°	353.5	351.5	347.6	349.5	349.2
12.5°	348.9	346.9	342.2	343.9	343.2
15°	342.6	340.9	336.3	337.6	335.9
17.5°	335.9	333.3	329.0	330.3	329.3
20°	328.3	325.7	321.0	321.7	320.4
22.5°	319.4	316.7	312.4	312.4	311.7
25°	310.1	307.4	302.4	302.1	302.1
27.5°	299.8	297.5	292.5	291.5	290.8
30°	289.5	287.5	282.2	280.2	279.2
32.5°	278.6	275.9	270.9	268.6	267.0
35°	267.3	264.3	258.7	256.4	255.4
37.5°	255.0	252.0	247.1	245.1	243.1
40°	243.1	240.4	234.8	231.8	231.1
42.5°	230.5	227.8	222.9	219.5	217.6
45°	217.6	215.2	209.9	206.6	204.6
47.5°	204.9	202.3	197.7	193.7	191.0
50°	192.0	189.4	184.4	179.7	178.7
52.5°	177.8	176.1	171.1	166.8	165.5
55°	164.2	162.8	158.5	154.2	152.6
57.5°	151.2	149.6	144.6	141.3	139.3
60°	137.0	136.0	131.7	128.0	126.7
62.5°	123.7	122.4	118.7	115.1	113.4
65°	110.8	109.1	105.5	102.1	100.8
67.5°	97.5	95.8	92.9	90.2	88.9
70°	84.2	82.9	79.9	77.6	75.9
72.5°	71.3	70.0	67.3	65.0	64.7
75°	58.0	57.7	55.7	53.7	53.1
77.5°	45.8	45.4	44.1	43.1	42.4
80°	33.8	33.8	32.8	31.8	31.5
82.5°	23.2	23.5	22.6	21.9	21.9
85°	14.6	13.9	12.9	12.3	11.9
87.5°	6.0	5.0	4.6	3.6	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)