

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: P243129

Luminaire Tested: **S122DR-H290D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243129
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-H290D930-X4F0-XX-UDD-F-W
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 942.3 lumens
Efficiency: N/A
Efficacy: 84.1 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

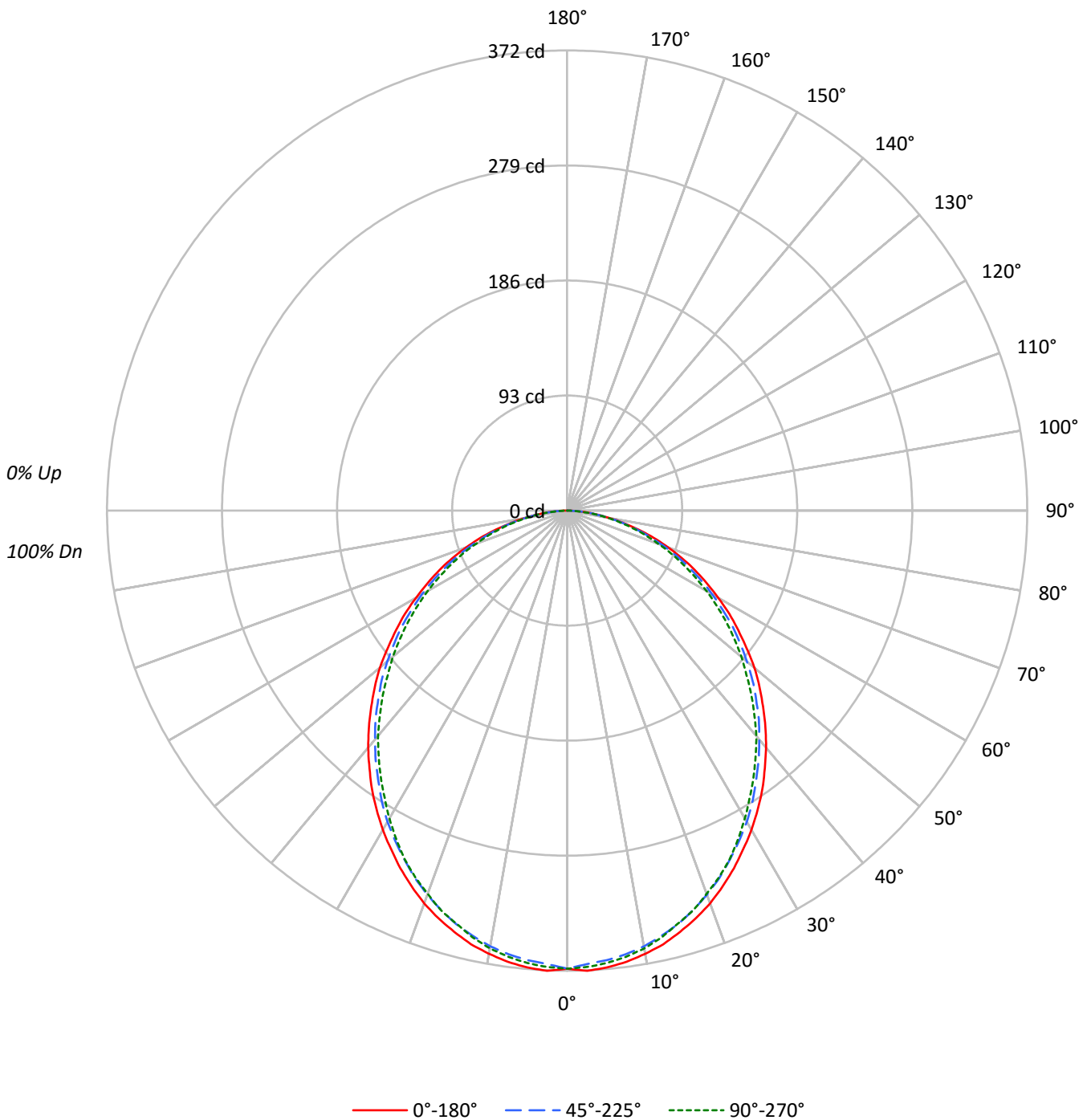
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	44	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°	7053	7053	7053
5°	7088	6977	7021
10°	7036	6918	6951
15°	6953	6825	6817
20°	6849	6697	6683
25°	6706	6543	6534
30°	6554	6389	6321
35°	6397	6190	6111
40°	6221	6007	5915
45°	6031	5819	5673
50°	5855	5624	5452
55°	5609	5416	5214
60°	5371	5162	4968
65°	5138	4890	4678
70°	4828	4583	4355
75°	4394	4217	4018
80°	3817	3708	3554
85°	3278	2907	2688



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	3.7
10°-20°	98.1	10.4
20°-30°	144.3	15.3
30°-40°	167.6	17.8
40°-50°	167.3	17.8
50°-60°	145.7	15.5
60°-70°	107.8	11.4
70°-80°	60.8	6.4
80°-90°	15.8	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°	277.3	29.4
0°-40°	444.9	47.2
0°-60°	757.9	80.4
0°-90°	942.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	371	369	365	368	367	35
15°	353	351	346	348	346	99
25°	319	316	311	311	311	147
35°	275	272	266	264	263	172
45°	224	222	216	213	211	173
55°	169	168	163	159	157	151
65°	114	112	108	105	104	113
75°	60	59	57	55	55	64
85°	15	14	13	13	12	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	370.3	370.3	370.3	370.3	370.3
2.5°	372.4	370.7	366.9	370.0	369.3
5°	370.7	369.0	364.9	367.9	367.2
7.5°	367.9	366.2	361.8	364.9	363.8
10°	363.8	361.8	357.7	359.7	359.4
12.5°	359.1	357.0	352.2	353.9	353.3
15°	352.6	350.9	346.1	347.5	345.7
17.5°	345.7	343.0	338.6	339.9	338.9
20°	337.9	335.2	330.4	331.1	329.7
22.5°	328.7	326.0	321.5	321.5	320.8
25°	319.1	316.4	311.3	310.9	310.9
27.5°	308.5	306.2	301.0	300.0	299.3
30°	298.0	295.9	290.5	288.4	287.4
32.5°	286.7	284.0	278.9	276.5	274.8
35°	275.1	272.0	266.2	263.8	262.8
37.5°	262.5	259.4	254.3	252.2	250.2
40°	250.2	247.4	241.6	238.6	237.9
42.5°	237.2	234.5	229.4	225.9	223.9
45°	223.9	221.5	216.0	212.6	210.6
47.5°	210.9	208.2	203.4	199.3	196.6
50°	197.6	194.9	189.8	185.0	184.0
52.5°	182.9	181.2	176.1	171.7	170.3
55°	168.9	167.6	163.1	158.7	157.0
57.5°	155.6	153.9	148.8	145.4	143.4
60°	141.0	139.9	135.5	131.7	130.4
62.5°	127.3	125.9	122.2	118.4	116.7
65°	114.0	112.3	108.5	105.1	103.8
67.5°	100.3	98.6	95.6	92.8	91.5
70°	86.7	85.3	82.3	79.9	78.2
72.5°	73.4	72.0	69.3	66.9	66.6
75°	59.7	59.4	57.3	55.3	54.6
77.5°	47.1	46.8	45.4	44.4	43.7
80°	34.8	34.8	33.8	32.8	32.4
82.5°	23.9	24.2	23.2	22.5	22.5
85°	15.0	14.3	13.3	12.6	12.3
87.5°	6.1	5.1	4.8	3.8	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)