

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: P243232

Luminaire Tested: **S122RDR-H290D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-H290D930-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED 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: 811.3 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

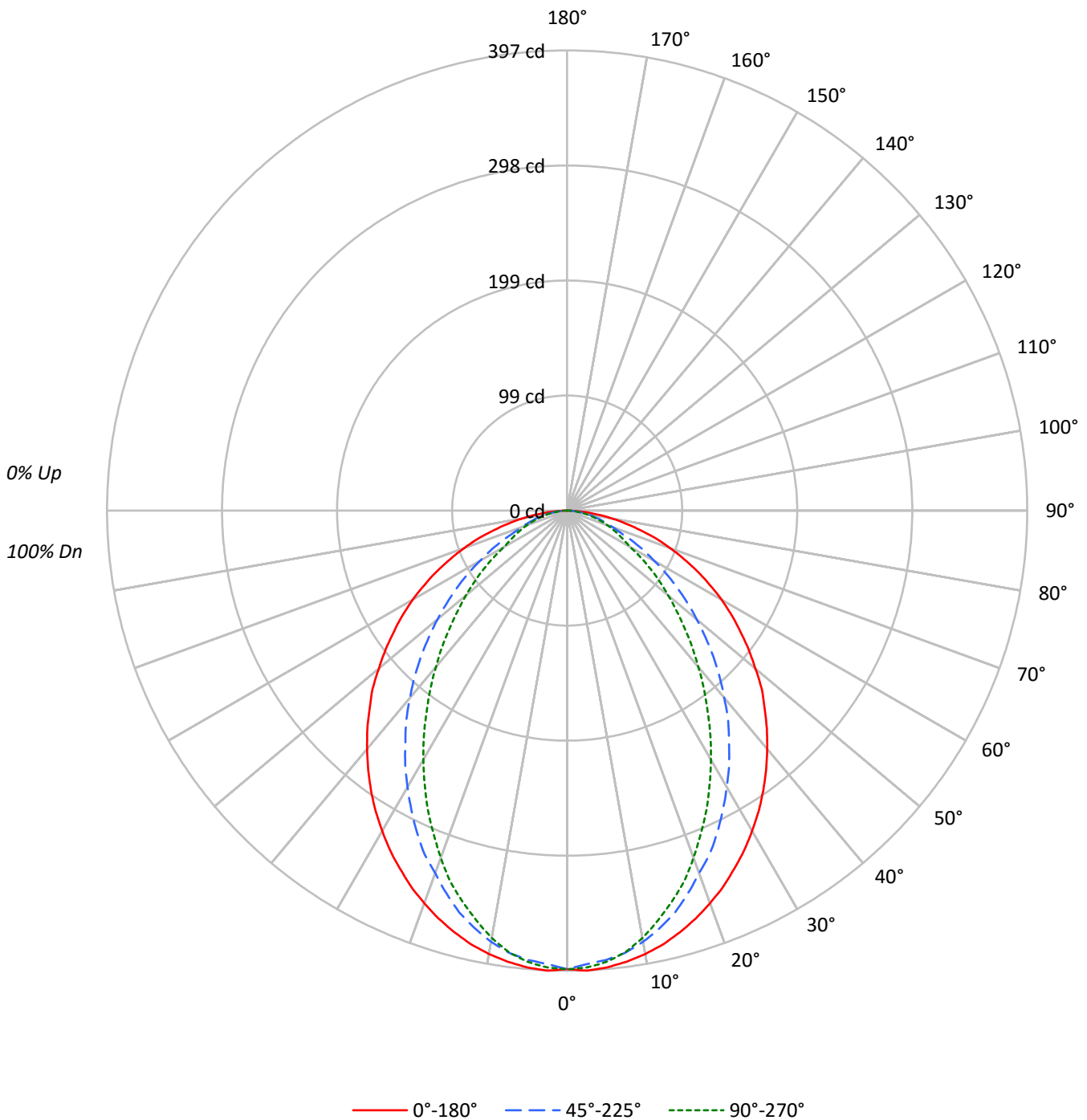
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7535	7535	7535
5°	7564	7440	7472
10°	7512	7307	7241
15°	7424	7081	6886
20°	7305	6746	6462
25°	7167	6442	5983
30°	7018	6057	5457
35°	6857	5660	4913
40°	6679	5244	4379
45°	6492	4808	3852
50°	6282	4329	3378
55°	6064	3852	2912
60°	5863	3314	2381
65°	5598	2799	2199
70°	5263	2317	2055
75°	4798	2112	1884
80°	4311	1876	1689
85°	3584	1574	1486



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	4.6
10°-20°	101.5	12.5
20°-30°	142.4	17.6
30°-40°	155.2	19.1
40°-50°	142.6	17.6
50°-60°	111.9	13.8
60°-70°	73.0	9.0
70°-80°	37.8	4.7
80°-90°	9.8	1.2
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°	281.0	34.6
0°-40°	436.2	53.8
0°-60°	690.7	85.1
0°-90°	811.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	811.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	394	389	392	391	38
15°	376	372	359	352	349	106
25°	341	329	306	292	285	157
35°	295	275	243	221	211	184
45°	241	216	178	153	143	186
55°	183	155	116	94	88	164
65°	124	94	62	50	49	123
75°	65	41	29	26	26	70
85°	16	8	7	7	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.6	395.6	395.6	395.6	395.6
2.5°	397.3	395.6	391.5	395.2	394.6
5°	395.6	393.5	389.1	391.8	390.8
7.5°	392.5	390.5	384.7	386.0	384.3
10°	388.4	385.7	377.8	376.5	374.4
12.5°	383.3	379.5	369.0	364.9	362.1
15°	376.5	372.0	359.1	351.9	349.2
17.5°	369.0	362.5	346.4	338.2	335.5
20°	360.4	352.9	332.8	324.2	318.8
22.5°	351.5	342.0	321.2	307.9	301.4
25°	341.0	329.0	306.5	291.5	284.7
27.5°	330.7	316.7	291.1	273.7	266.2
30°	319.1	303.8	275.4	255.3	248.1
32.5°	307.5	289.8	260.1	238.2	230.0
35°	294.9	275.4	243.4	220.8	211.3
37.5°	281.9	261.8	228.0	203.1	193.9
40°	268.6	246.1	210.9	185.0	176.1
42.5°	255.0	232.1	194.9	168.3	159.7
45°	241.0	216.4	178.5	152.6	143.0
47.5°	227.7	201.0	161.8	137.2	128.0
50°	212.0	185.7	146.1	121.2	114.0
52.5°	197.6	170.3	130.7	106.8	100.7
55°	182.6	155.3	116.0	94.2	87.7
57.5°	168.6	139.6	101.4	81.6	75.4
60°	153.9	124.6	87.0	68.9	62.5
62.5°	138.6	109.2	74.4	57.3	55.3
65°	124.2	94.2	62.1	50.5	48.8
67.5°	108.9	80.2	49.5	44.4	42.7
70°	94.5	66.6	41.6	37.9	36.9
72.5°	80.5	53.6	35.2	32.1	31.1
75°	65.2	40.6	28.7	26.3	25.6
77.5°	51.9	28.7	22.9	21.2	20.5
80°	39.3	20.8	17.1	16.0	15.4
82.5°	27.0	14.0	11.9	11.3	10.9
85°	16.4	7.9	7.2	6.8	6.8
87.5°	6.5	3.1	3.1	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)