

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: P243218

Luminaire Tested: **S122RDR-H290D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243218
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-H290D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 937.9 lumens
Efficiency: N/A
Efficacy: 83.7 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

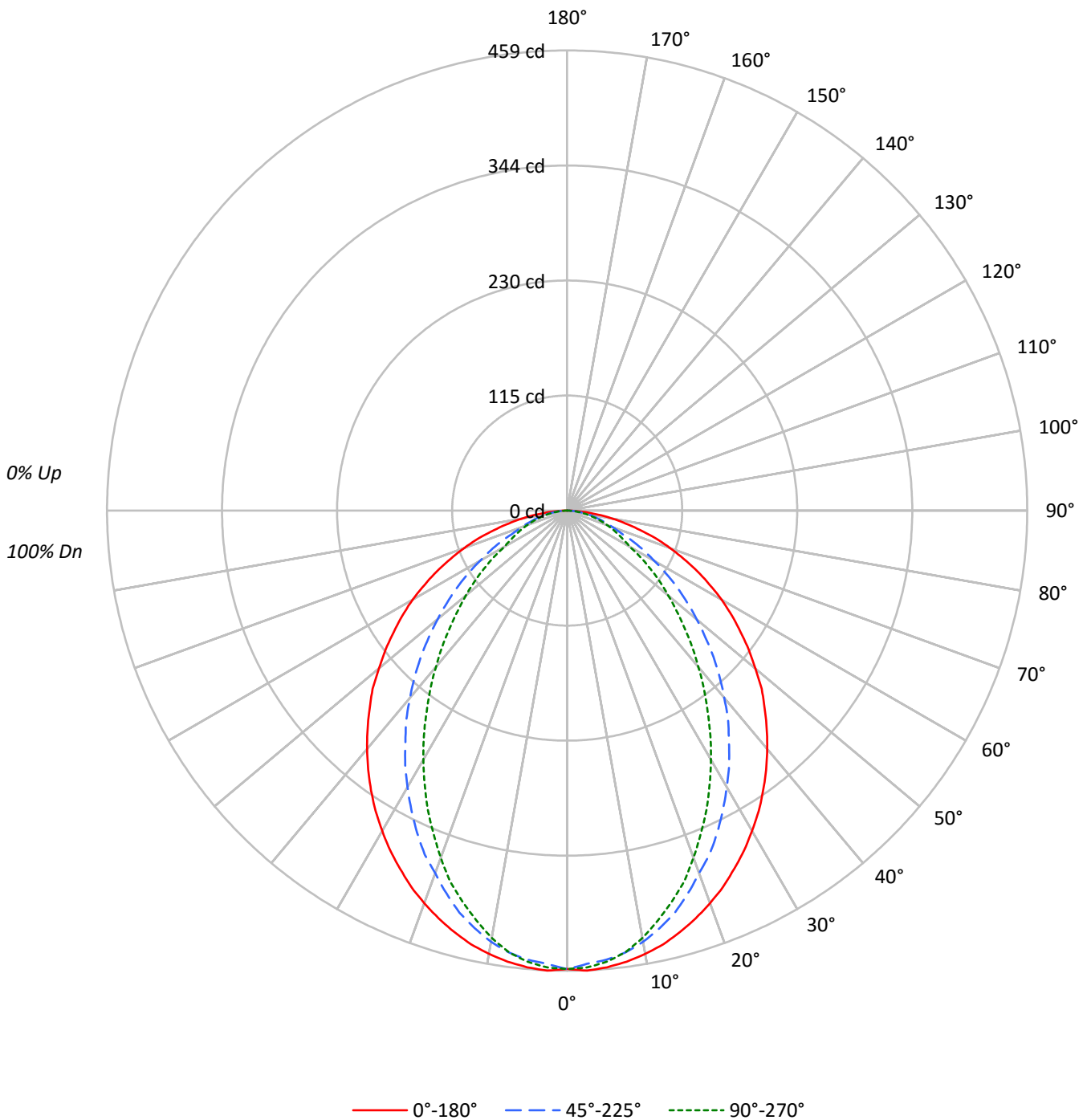
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8711	8711	8711
5°	8744	8600	8639
10°	8684	8448	8373
15°	8582	8186	7961
20°	8447	7798	7470
25°	8285	7446	6917
30°	8114	7003	6310
35°	7927	6541	5678
40°	7721	6062	5063
45°	7505	5560	4453
50°	7260	5005	3906
55°	7010	4457	3367
60°	6781	3832	2750
65°	6472	3236	2542
70°	6087	2679	2372
75°	5549	2436	2178
80°	4980	2161	1953
85°	4131	1814	1727



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.8	4.6
10°-20°	117.4	12.5
20°-30°	164.7	17.6
30°-40°	179.4	19.1
40°-50°	164.9	17.6
50°-60°	129.4	13.8
60°-70°	84.4	9.0
70°-80°	43.6	4.7
80°-90°	11.3	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°	324.9	34.6
0°-40°	504.3	53.8
0°-60°	798.5	85.1
0°-90°	937.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	937.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	455	450	453	452	43
15°	435	430	415	407	404	123
25°	394	380	354	337	329	182
35°	341	318	281	255	244	213
45°	279	250	206	176	165	215
55°	211	180	134	109	101	189
65°	144	109	72	58	56	142
75°	75	47	33	30	30	81
85°	19	9	8	8	8	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.3	457.3	457.3	457.3	457.3
2.5°	459.3	457.3	452.6	456.9	456.1
5°	457.3	454.9	449.8	453.0	451.8
7.5°	453.8	451.4	444.7	446.3	444.3
10°	449.0	445.9	436.8	435.2	432.9
12.5°	443.1	438.8	426.5	421.8	418.6
15°	435.2	430.1	415.1	406.8	403.7
17.5°	426.5	419.0	400.5	391.0	387.9
20°	416.7	408.0	384.7	374.8	368.5
22.5°	406.4	395.4	371.3	355.9	348.4
25°	394.2	380.4	354.3	337.0	329.1
27.5°	382.3	366.2	336.6	316.5	307.8
30°	368.9	351.2	318.4	295.1	286.9
32.5°	355.5	335.0	300.7	275.4	265.9
35°	340.9	318.4	281.3	255.3	244.2
37.5°	325.9	302.6	263.6	234.8	224.1
40°	310.5	284.5	243.8	213.9	203.6
42.5°	294.7	268.3	225.3	194.5	184.7
45°	278.6	250.2	206.4	176.4	165.3
47.5°	263.2	232.4	187.0	158.6	148.0
50°	245.0	214.7	168.9	140.1	131.8
52.5°	228.5	196.9	151.1	123.5	116.4
55°	211.1	179.5	134.2	108.9	101.4
57.5°	194.9	161.4	117.2	94.3	87.2
60°	178.0	144.0	100.6	79.7	72.2
62.5°	160.2	126.3	86.0	66.3	63.9
65°	143.6	108.9	71.8	58.4	56.4
67.5°	125.9	92.7	57.2	51.3	49.3
70°	109.3	76.9	48.1	43.8	42.6
72.5°	93.1	61.9	40.6	37.1	35.9
75°	75.4	47.0	33.1	30.4	29.6
77.5°	60.0	33.1	26.4	24.5	23.7
80°	45.4	24.1	19.7	18.5	17.8
82.5°	31.2	16.2	13.8	13.0	12.6
85°	18.9	9.1	8.3	7.9	7.9
87.5°	7.5	3.6	3.6	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)