

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: P243213

Luminaire Tested: **S122RDR-H290D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243213
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-H290D927-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED 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: 788.3 lumens
Efficiency: N/A
Efficacy: 70.4 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

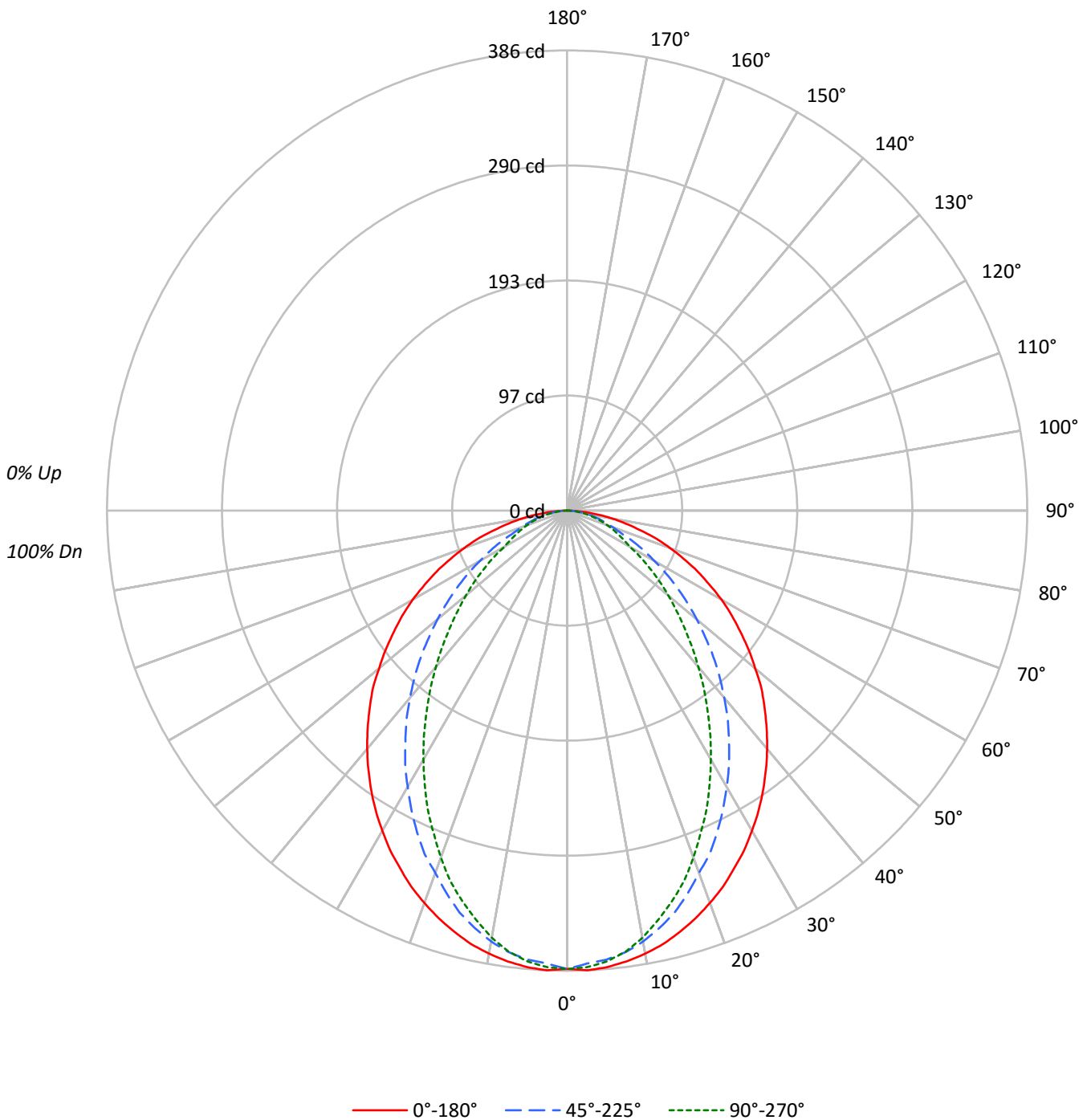
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7322	7322	7322
5°	7350	7229	7260
10°	7300	7100	7036
15°	7213	6880	6691
20°	7099	6553	6278
25°	6963	6259	5813
30°	6820	5886	5303
35°	6662	5499	4774
40°	6490	5095	4254
45°	6306	4671	3744
50°	6101	4205	3283
55°	5891	3746	2829
60°	5699	3223	2312
65°	5440	2722	2136
70°	5118	2256	1994
75°	4659	2053	1833
80°	4179	1821	1634
85°	3475	1530	1442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.0	4.6
10°-20°	98.7	12.5
20°-30°	138.4	17.6
30°-40°	150.8	19.1
40°-50°	138.6	17.6
50°-60°	108.7	13.8
60°-70°	70.9	9.0
70°-80°	36.7	4.7
80°-90°	9.5	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°	273.1	34.6
0°-40°	423.8	53.8
0°-60°	671.1	85.1
0°-90°	788.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	788.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	382	378	381	380	36
15°	366	362	349	342	339	103
25°	331	320	298	283	277	153
35°	286	268	236	215	205	179
45°	234	210	173	148	139	181
55°	177	151	113	92	85	159
65°	121	92	60	49	47	119
75°	63	40	28	26	25	68
85°	16	8	7	7	7	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	384.4	384.4	384.4	384.4	384.4
2.5°	386.0	384.4	380.4	384.0	383.4
5°	384.4	382.4	378.1	380.7	379.7
7.5°	381.4	379.4	373.7	375.1	373.4
10°	377.4	374.7	367.1	365.8	363.8
12.5°	372.4	368.8	358.5	354.5	351.9
15°	365.8	361.5	348.9	341.9	339.3
17.5°	358.5	352.2	336.6	328.6	326.0
20°	350.2	342.9	323.3	315.1	309.7
22.5°	341.6	332.3	312.1	299.1	292.8
25°	331.3	319.7	297.8	283.2	276.6
27.5°	321.4	307.8	282.9	266.0	258.7
30°	310.1	295.2	267.6	248.1	241.1
32.5°	298.8	281.6	252.7	231.5	223.5
35°	286.5	267.6	236.5	214.6	205.3
37.5°	273.9	254.4	221.5	197.3	188.4
40°	261.0	239.1	204.9	179.7	171.1
42.5°	247.7	225.5	189.4	163.5	155.2
45°	234.1	210.3	173.4	148.2	139.0
47.5°	221.2	195.3	157.2	133.3	124.4
50°	205.9	180.4	141.9	117.7	110.8
52.5°	192.0	165.5	127.0	103.8	97.8
55°	177.4	150.9	112.8	91.5	85.2
57.5°	163.8	135.6	98.5	79.3	73.3
60°	149.6	121.0	84.6	67.0	60.7
62.5°	134.6	106.1	72.3	55.7	53.7
65°	120.7	91.5	60.4	49.1	47.4
67.5°	105.8	77.9	48.1	43.1	41.5
70°	91.9	64.7	40.5	36.8	35.8
72.5°	78.3	52.1	34.2	31.2	30.2
75°	63.3	39.5	27.9	25.5	24.9
77.5°	50.4	27.9	22.2	20.6	19.9
80°	38.1	20.2	16.6	15.6	14.9
82.5°	26.2	13.6	11.6	10.9	10.6
85°	15.9	7.6	7.0	6.6	6.6
87.5°	6.3	3.0	3.0	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)