

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: P242372

Luminaire Tested: **S122RDR-S290D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D930-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 809.0 lumens
Efficiency: N/A
Efficacy: 69.7 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

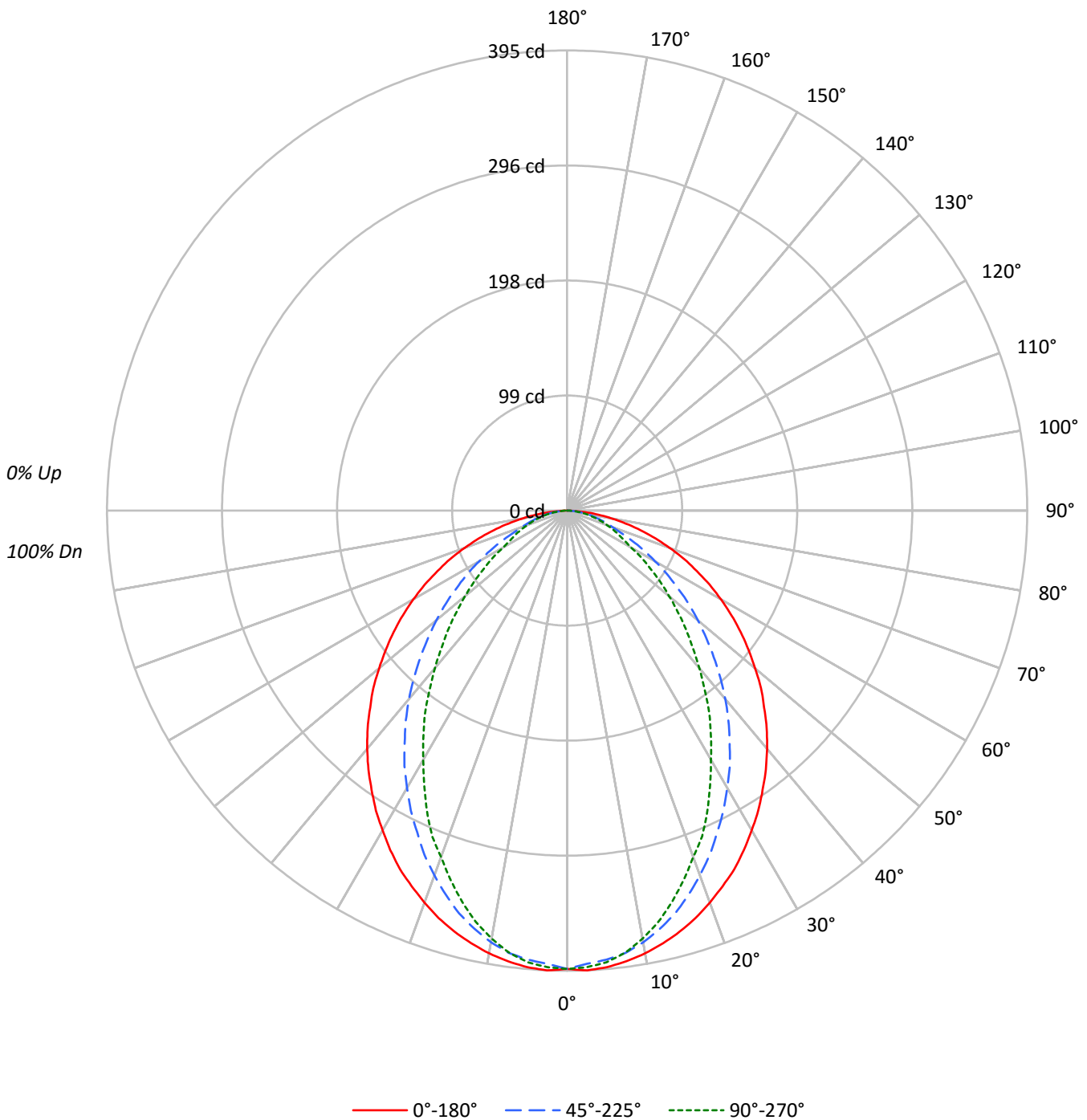
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	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°	7493	7493	7493
5°	7522	7398	7440
10°	7464	7278	7216
15°	7377	7062	6858
20°	7259	6754	6416
25°	7137	6404	5986
30°	6968	6044	5433
35°	6804	5653	4951
40°	6639	5249	4391
45°	6443	4795	3884
50°	6244	4335	3387
55°	6041	3842	2909
60°	5806	3322	2415
65°	5535	2790	2199
70°	5213	2300	2022
75°	4820	2097	1884
80°	4256	1876	1722
85°	3344	1486	1486



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	4.6
10°-20°	101.2	12.5
20°-30°	142.1	17.6
30°-40°	154.9	19.1
40°-50°	142.4	17.6
50°-60°	111.8	13.8
60°-70°	72.8	9.0
70°-80°	37.5	4.6
80°-90°	9.6	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°	280.2	34.6
0°-40°	435.0	53.8
0°-60°	689.2	85.2
0°-90°	809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	393	393	393	393	393	
5°	393	392	387	390	389	37
15°	374	370	358	351	348	105
25°	340	328	305	290	285	156
35°	293	274	243	221	213	183
45°	239	215	178	153	144	185
55°	182	154	116	94	88	163
65°	123	94	62	50	49	122
75°	66	41	28	26	26	69
85°	15	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°	393.4	393.4	393.4	393.4	393.4
2.5°	395.1	393.4	389.4	393.0	392.3
5°	393.4	391.6	386.9	390.2	389.1
7.5°	390.2	388.0	383.0	384.5	382.7
10°	385.9	383.4	376.3	375.2	373.1
12.5°	380.5	377.3	367.7	365.6	361.7
15°	374.1	370.2	358.1	351.4	347.8
17.5°	366.7	361.0	346.0	338.2	332.5
20°	358.1	351.0	333.2	324.3	316.5
22.5°	348.9	340.7	320.0	307.9	302.6
25°	339.6	328.2	304.7	290.1	284.8
27.5°	328.6	316.5	290.5	273.7	265.6
30°	316.8	303.3	274.8	256.7	247.0
32.5°	305.4	289.1	259.9	238.5	229.6
35°	292.6	274.5	243.1	220.7	212.9
37.5°	280.2	260.6	227.5	202.9	194.0
40°	267.0	245.6	211.1	185.8	176.6
42.5°	253.5	230.7	194.7	168.4	159.5
45°	239.2	215.4	178.0	152.7	144.2
47.5°	225.7	200.4	162.0	136.7	128.9
50°	210.7	185.5	146.3	121.7	114.3
52.5°	196.1	169.4	131.4	107.9	101.1
55°	181.9	154.1	115.7	94.3	87.6
57.5°	167.3	138.8	101.8	81.9	76.2
60°	152.4	123.9	87.2	69.1	63.4
62.5°	137.8	109.3	74.8	57.7	54.8
65°	122.8	94.0	61.9	49.8	48.8
67.5°	108.6	79.7	49.8	43.8	42.7
70°	93.6	65.9	41.3	37.7	36.3
72.5°	79.4	53.0	34.5	31.7	31.0
75°	65.5	40.6	28.5	26.0	25.6
77.5°	51.6	28.8	22.4	21.0	20.3
80°	38.8	20.6	17.1	15.7	15.7
82.5°	27.1	13.9	11.7	11.0	11.0
85°	15.3	7.8	6.8	6.8	6.8
87.5°	5.7	2.8	2.8	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)