

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: P333895

Luminaire Tested: **S122RDW-S290D927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333895  
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: S122RDW-S290D927-4F0-1E-UDD-F  
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 290 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 786.0 lumens  
Efficiency: N/A  
Efficacy: 67.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

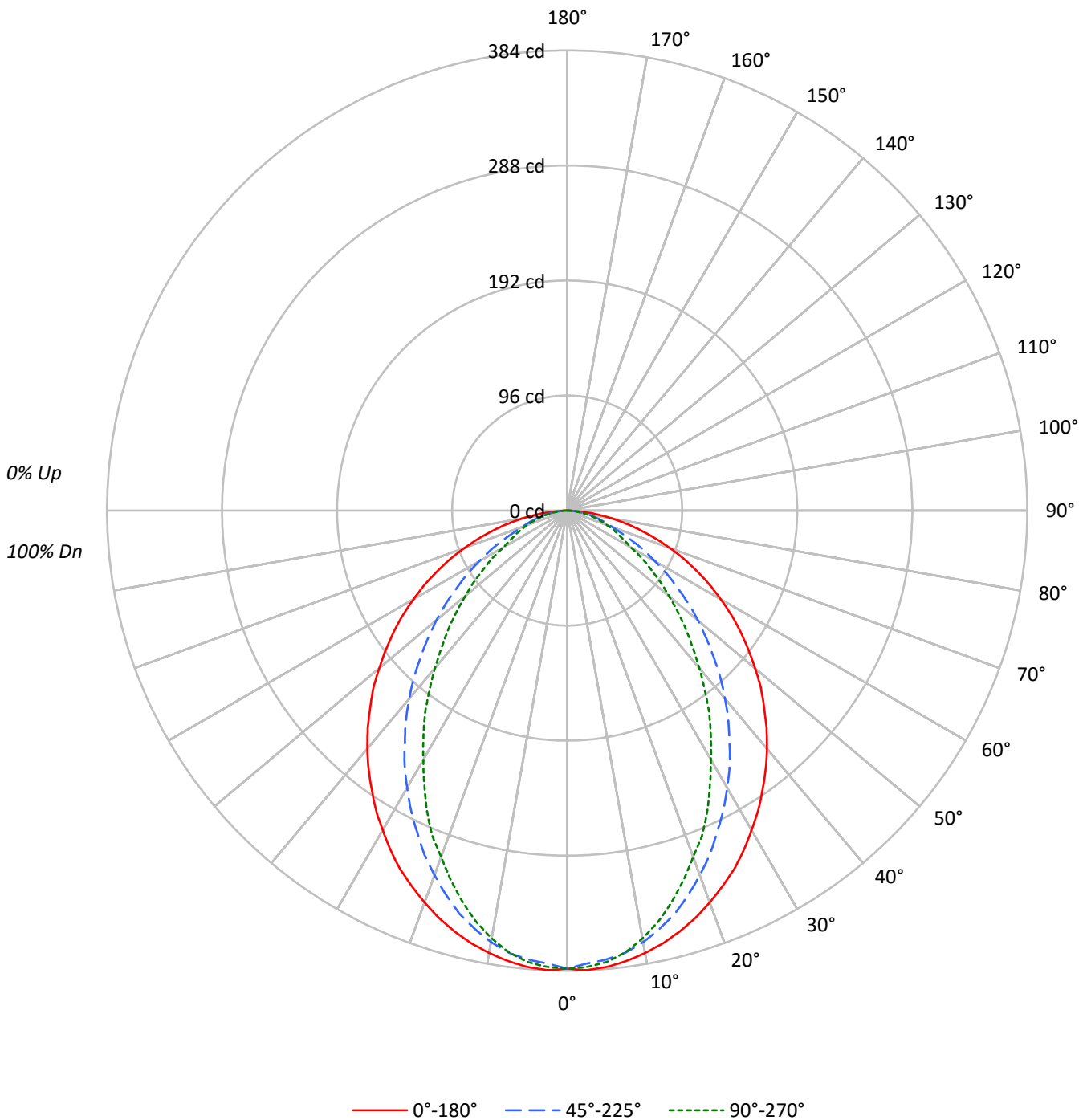
Input Watts (W): 11.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6171	6171	6171
5°	6195	6094	6128
10°	6146	5994	5943
15°	6076	5817	5648
20°	5979	5562	5283
25°	5879	5275	4929
30°	5739	4978	4474
35°	5604	4656	4076
40°	5467	4323	3617
45°	5307	3948	3199
50°	5144	3572	2788
55°	4974	3164	2396
60°	4779	2735	1989
65°	4558	2300	1811
70°	4296	1893	1666
75°	3968	1728	1553
80°	3505	1543	1413
85°	2760	1223	1223



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.8	4.6
10°-20°	98.3	12.5
20°-30°	138.1	17.6
30°-40°	150.5	19.1
40°-50°	138.3	17.6
50°-60°	108.6	13.8
60°-70°	70.7	9.0
70°-80°	36.4	4.6
80°-90°	9.3	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°	272.2	34.6
0°-40°	422.7	53.8
0°-60°	669.7	85.2
0°-90°	786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	382	380	376	379	378	36
15°	364	360	348	341	338	102
25°	330	319	296	282	277	152
35°	284	267	236	214	207	178
45°	232	209	173	148	140	180
55°	177	150	112	92	85	158
65°	119	91	60	48	47	118
75°	64	39	28	25	25	67
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°	382.2	382.2	382.2	382.2	382.2
2.5°	383.9	382.2	378.4	381.9	381.2
5°	382.2	380.5	376.0	379.1	378.1
7.5°	379.1	377.0	372.2	373.6	371.8
10°	374.9	372.5	365.6	364.6	362.5
12.5°	369.8	366.6	357.3	355.2	351.4
15°	363.5	359.7	348.0	341.4	337.9
17.5°	356.3	350.7	336.2	328.6	323.1
20°	348.0	341.0	323.7	315.1	307.5
22.5°	339.0	331.0	311.0	299.2	294.0
25°	330.0	318.9	296.1	281.9	276.7
27.5°	319.3	307.5	282.2	266.0	258.0
30°	307.8	294.7	267.0	249.4	240.0
32.5°	296.8	280.9	252.5	231.7	223.1
35°	284.3	266.7	236.2	214.4	206.8
37.5°	272.2	253.2	221.0	197.2	188.5
40°	259.4	238.7	205.1	180.6	171.6
42.5°	246.3	224.1	189.2	163.6	155.0
45°	232.4	209.3	172.9	148.4	140.1
47.5°	219.3	194.7	157.4	132.8	125.2
50°	204.8	180.2	142.2	118.3	111.0
52.5°	190.6	164.6	127.6	104.8	98.2
55°	176.7	149.8	112.4	91.7	85.1
57.5°	162.6	134.9	98.9	79.6	74.0
60°	148.0	120.4	84.7	67.1	61.6
62.5°	133.9	106.2	72.6	56.0	53.3
65°	119.3	91.3	60.2	48.4	47.4
67.5°	105.5	77.5	48.4	42.5	41.5
70°	91.0	64.0	40.1	36.7	35.3
72.5°	77.1	51.5	33.6	30.8	30.1
75°	63.6	39.4	27.7	25.2	24.9
77.5°	50.2	28.0	21.8	20.4	19.7
80°	37.7	20.1	16.6	15.2	15.2
82.5°	26.3	13.5	11.4	10.7	10.7
85°	14.9	7.6	6.6	6.6	6.6
87.5°	5.5	2.8	2.8	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)