

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: P333890

Luminaire Tested: **S122RDW-S290D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333890  
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-S290D840-4F0-1E-UDD-F  
Description: DEFINE 2 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 290 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

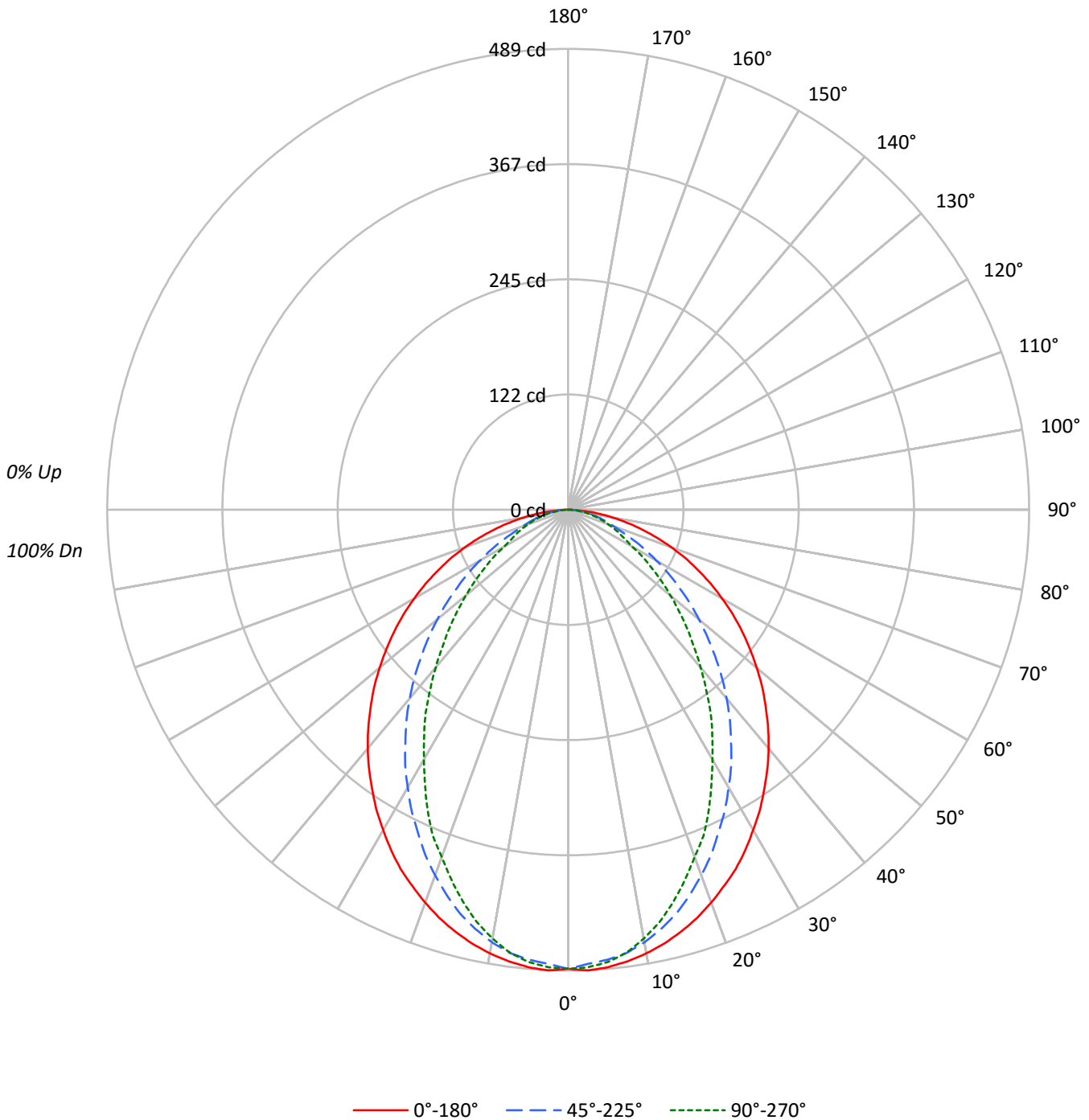
Lumens per Lamp: N/A  
Luminaire Lumens: 1002.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

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	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					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°	7866	7866	7866
5°	7896	7768	7810
10°	7837	7642	7576
15°	7746	7415	7201
20°	7622	7091	6735
25°	7493	6723	6283
30°	7316	6346	5705
35°	7143	5937	5198
40°	6970	5512	4610
45°	6766	5035	4078
50°	6556	4551	3554
55°	6342	4034	3054
60°	6093	3488	2535
65°	5811	2930	2308
70°	5476	2412	2124
75°	5059	2202	1978
80°	4472	1971	1804
85°	3520	1556	1556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	4.6
10°-20°	125.4	12.5
20°-30°	176.0	17.6
30°-40°	191.8	19.1
40°-50°	176.3	17.6
50°-60°	138.5	13.8
60°-70°	90.1	9.0
70°-80°	46.4	4.6
80°-90°	11.9	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°	347.0	34.6
0°-40°	538.9	53.8
0°-60°	853.7	85.2
0°-90°	1002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1002.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	487	485	479	483	482	46
15°	463	459	444	435	431	131
25°	421	406	377	359	353	193
35°	362	340	301	273	264	227
45°	296	267	220	189	179	229
55°	225	191	143	117	108	201
65°	152	116	77	62	60	151
75°	81	50	35	32	32	86
85°	19	10	8	8	8	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	487.2	487.2	487.2	487.2	487.2
2.5°	489.4	487.2	482.4	486.8	485.9
5°	487.2	485.0	479.3	483.3	481.9
7.5°	483.3	480.6	474.4	476.2	474.0
10°	478.0	474.9	466.1	464.7	462.1
12.5°	471.4	467.4	455.5	452.8	448.0
15°	463.4	458.6	443.6	435.2	430.8
17.5°	454.2	447.1	428.6	418.9	411.8
20°	443.6	434.8	412.7	401.7	392.0
22.5°	432.1	422.0	396.4	381.4	374.8
25°	420.6	406.5	377.4	359.4	352.7
27.5°	407.0	392.0	359.8	339.1	328.9
30°	392.4	375.7	340.4	317.9	306.0
32.5°	378.3	358.0	321.9	295.4	284.4
35°	362.4	340.0	301.2	273.4	263.7
37.5°	347.0	322.8	281.8	251.3	240.3
40°	330.7	304.2	261.5	230.2	218.7
42.5°	313.9	285.7	241.2	208.6	197.5
45°	296.3	266.8	220.5	189.2	178.6
47.5°	279.5	248.2	200.6	169.3	159.6
50°	261.0	229.7	181.2	150.8	141.5
52.5°	243.0	209.9	162.7	133.6	125.2
55°	225.3	190.9	143.3	116.8	108.5
57.5°	207.2	172.0	126.1	101.4	94.4
60°	188.7	153.4	108.0	85.5	78.5
62.5°	170.6	135.4	92.6	71.4	67.9
65°	152.1	116.4	76.7	61.7	60.4
67.5°	134.5	98.8	61.7	54.2	52.9
70°	116.0	81.6	51.1	46.7	45.0
72.5°	98.3	65.7	42.8	39.2	38.4
75°	81.1	50.3	35.3	32.2	31.7
77.5°	63.9	35.7	27.8	26.0	25.1
80°	48.1	25.6	21.2	19.4	19.4
82.5°	33.5	17.2	14.6	13.7	13.7
85°	19.0	9.7	8.4	8.4	8.4
87.5°	7.1	3.5	3.5	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)