

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1057876

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S290D830-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

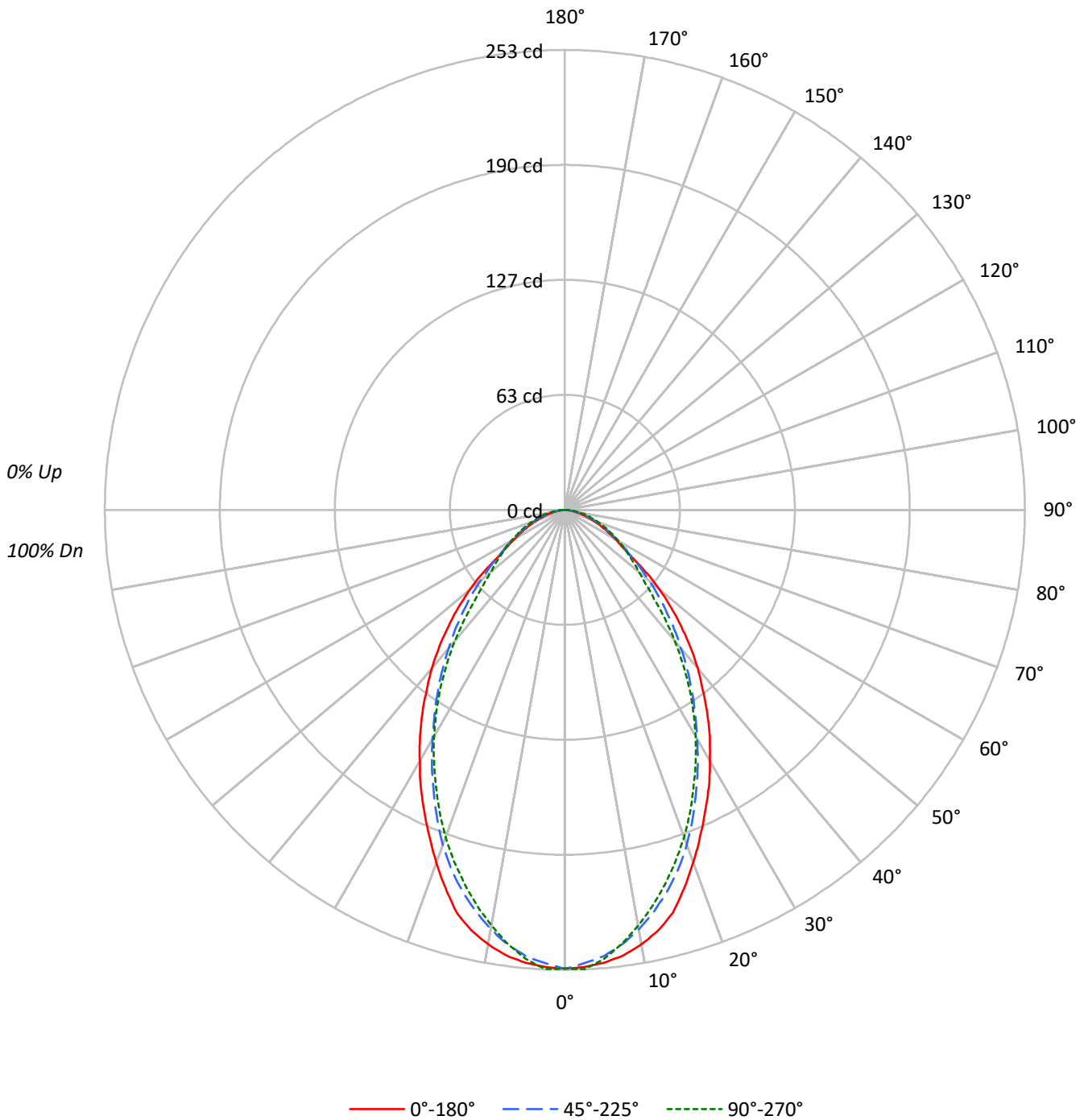
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 383.3 lumens  
Efficiency: N/A  
Efficacy: 30.7 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
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: 24 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4657	4657	4657
5°	4631	4564	4594
10°	4548	4390	4353
15°	4384	4153	4069
20°	4057	3851	3764
25°	3724	3477	3412
30°	3401	3100	3066
35°	3077	2744	2681
40°	2739	2392	2264
45°	2359	2056	1814
50°	1949	1731	1521
55°	1409	1435	1370
60°	1170	1233	1247
65°	1000	1070	1140
70°	825	955	1041
75°	684	806	948
80°	510	638	850
85°	169	339	762

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2359 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	6.1
10°-20°	61.4	16.0
20°-30°	79.5	20.7
30°-40°	78.0	20.3
40°-50°	61.4	16.0
50°-60°	40.3	10.5
60°-70°	24.5	6.4
70°-80°	12.2	3.2
80°-90°	2.6	0.7
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°	164.3	42.9
0°-40°	242.3	63.2
0°-60°	343.9	89.7
0°-90°	383.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	383.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	250	250	246	248	248	24
15°	230	226	217	215	213	64
25°	183	177	171	170	168	84
35°	137	129	122	121	119	85
45°	90	85	79	73	70	70
55°	44	46	45	43	43	42
65°	23	23	24	26	26	23
75°	10	10	11	13	13	10
85°	1	1	2	3	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	252.4	252.4	252.4	252.4	252.4
2.5°	251.6	252.0	249.6	252.0	252.8
5°	250.0	250.0	246.4	248.0	248.0
7.5°	247.2	246.8	241.1	241.1	240.7
10°	242.7	241.1	234.3	233.1	232.3
12.5°	237.1	234.3	226.3	224.3	223.0
15°	229.5	226.3	217.4	214.6	213.0
17.5°	218.2	215.0	207.4	204.2	202.6
20°	206.6	201.7	196.1	193.3	191.7
22.5°	194.5	188.9	183.7	181.7	180.0
25°	182.9	176.8	170.8	170.0	167.6
27.5°	171.6	164.4	158.3	157.9	155.9
30°	159.6	151.9	145.5	145.9	143.9
32.5°	148.3	141.1	133.4	133.8	131.4
35°	136.6	129.0	121.8	121.4	119.0
37.5°	124.6	117.4	110.5	108.9	106.5
40°	113.7	106.5	99.3	96.5	94.0
42.5°	102.1	95.7	89.2	84.8	81.6
45°	90.4	84.8	78.8	73.1	69.5
47.5°	79.2	74.8	69.5	62.7	60.3
50°	67.9	64.7	60.3	54.3	53.0
52.5°	56.3	55.1	52.2	48.2	47.8
55°	43.8	46.2	44.6	43.0	42.6
57.5°	37.0	37.4	38.6	38.2	38.2
60°	31.7	31.7	33.4	33.8	33.8
62.5°	26.9	27.3	28.9	29.7	29.7
65°	22.9	23.3	24.5	25.7	26.1
67.5°	18.9	19.7	20.9	22.1	22.5
70°	15.3	16.1	17.7	18.9	19.3
72.5°	12.5	12.9	14.5	15.7	16.1
75°	9.6	10.0	11.3	12.9	13.3
77.5°	6.8	7.6	8.8	10.0	10.9
80°	4.8	5.2	6.0	7.6	8.0
82.5°	2.8	3.2	4.0	5.2	5.6
85°	0.8	1.2	1.6	2.8	3.6
87.5°	0.0	0.0	0.0	0.8	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)