

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058192

Luminaire Tested: S122RDRP-S865D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058192  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D950-X4F0-XX-UDD-WVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

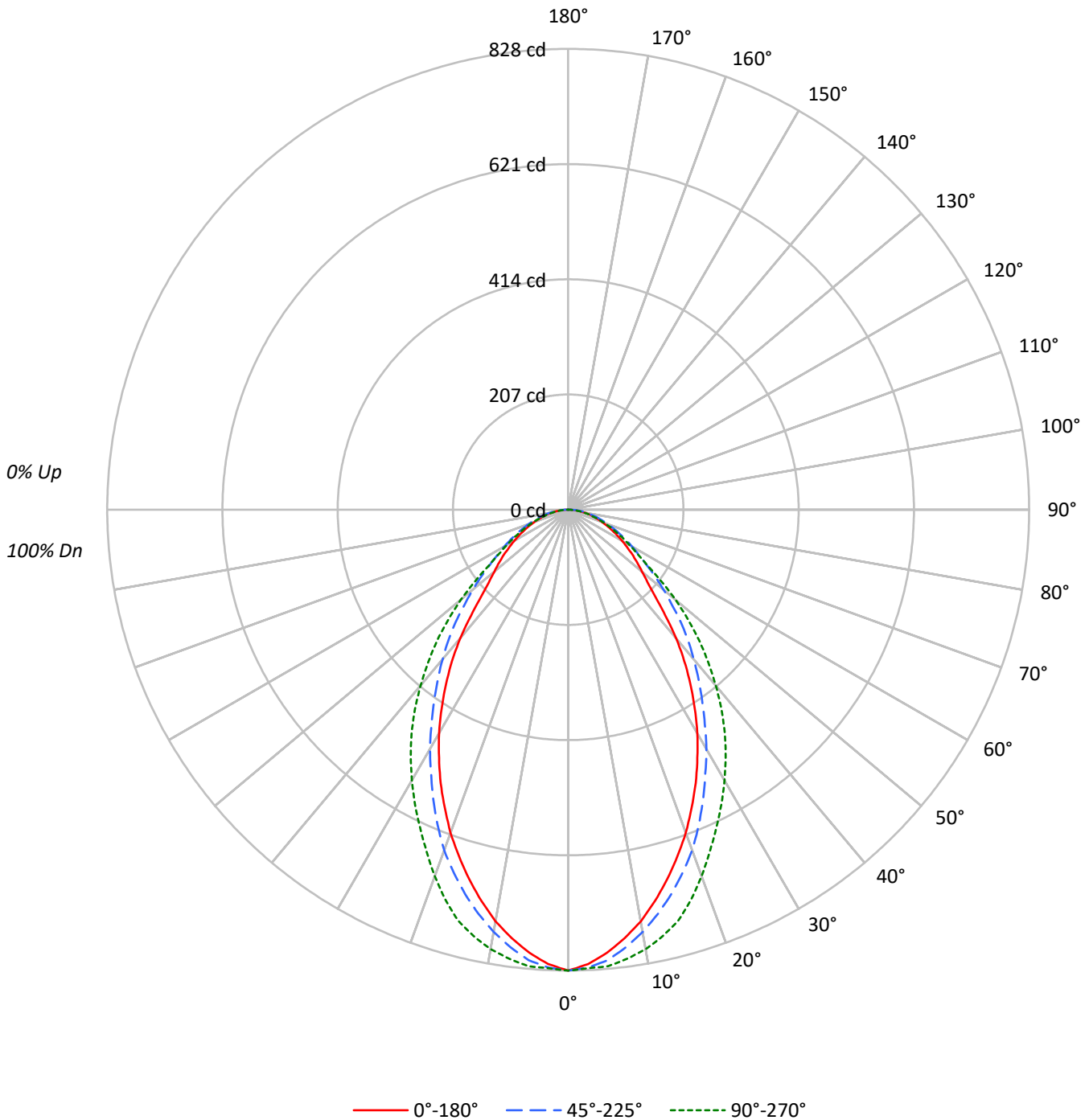
Lumens per Lamp: N/A  
Luminaire Lumens: 1348.4 lumens  
Efficiency: N/A  
Efficacy: 38.5 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33

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

	0°	45°	90°
0°	15280	15280	15280
5°	14804	15048	15250
10°	14073	14435	15020
15°	13132	13661	14603
20°	12130	12791	13759
25°	11035	11672	12823
30°	9884	10577	11960
35°	8610	9448	11045
40°	7267	8452	9929
45°	5770	7463	8687
50°	4969	6416	7211
55°	4523	5492	5530
60°	4126	4879	4702
65°	3777	4410	4144
70°	3501	4084	3696
75°	3258	3857	3258
80°	3060	3709	2933
85°	3049	3811	2541

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8687 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	5.7
10°-20°	202.1	15.0
20°-30°	265.9	19.7
30°-40°	267.4	19.8
40°-50°	216.7	16.1
50°-60°	149.3	11.1
60°-70°	97.7	7.2
70°-80°	54.4	4.0
80°-90°	18.4	1.4
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°	544.4	40.4
0°-40°	811.8	60.2
0°-60°	1177.8	87.4
0°-90°	1348.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1348.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	799	815	812	816	823	75
15°	687	704	715	742	764	193
25°	542	556	573	598	630	248
35°	382	400	419	457	490	238
45°	221	246	286	311	333	175
55°	141	156	171	174	172	126
65°	86	103	101	96	95	86
75°	46	56	54	48	46	49
85°	14	19	18	16	12	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	828.1	828.1	828.1	828.1	828.1
2.5°	817.2	831.7	823.3	823.3	824.5
5°	799.2	814.8	812.4	816.0	823.3
7.5°	776.4	793.2	793.2	804.0	813.6
10°	751.1	768.0	770.4	787.2	801.6
12.5°	719.9	736.7	743.9	765.6	784.8
15°	687.4	704.3	715.1	741.5	764.4
17.5°	652.6	669.4	683.8	711.5	734.3
20°	617.7	633.4	651.4	675.4	700.7
22.5°	579.3	596.1	612.9	635.8	664.6
25°	542.0	556.4	573.3	598.5	629.8
27.5°	502.4	518.0	533.6	563.7	596.1
30°	463.9	479.5	496.4	527.6	561.3
32.5°	423.0	439.9	456.7	491.5	526.4
35°	382.2	400.2	419.4	456.7	490.3
37.5°	342.5	361.8	384.6	423.0	451.9
40°	301.7	322.1	350.9	384.6	412.2
42.5°	258.4	283.6	318.5	347.3	372.6
45°	221.1	246.4	286.0	311.3	332.9
47.5°	193.5	213.9	252.4	274.0	292.0
50°	173.1	188.7	223.5	239.2	251.2
52.5°	156.2	171.9	195.9	206.7	210.3
55°	140.6	156.2	170.7	174.3	171.9
57.5°	125.0	141.8	150.2	146.6	146.6
60°	111.8	129.8	132.2	127.4	127.4
62.5°	98.5	116.6	116.6	110.6	110.6
65°	86.5	103.4	101.0	96.1	94.9
67.5°	75.7	91.3	87.7	82.9	81.7
70°	64.9	79.3	75.7	69.7	68.5
72.5°	55.3	68.5	63.7	58.9	56.5
75°	45.7	56.5	54.1	48.1	45.7
77.5°	37.3	45.7	43.3	38.5	36.1
80°	28.8	36.1	34.9	30.0	27.6
82.5°	21.6	27.6	26.4	22.8	19.2
85°	14.4	19.2	18.0	15.6	12.0
87.5°	7.2	13.2	12.0	10.8	6.0
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.20	17.64	16.57	17.96	18.27	16.56	18.00	16.93	18.31	18.63
	3H	17.75	19.04	18.12	19.36	19.73	17.91	19.20	18.29	19.53	19.89
	4H	18.32	19.53	18.72	19.87	20.25	18.39	19.60	18.79	19.95	20.33
	6H	18.75	19.86	19.16	20.23	20.62	18.74	19.86	19.16	20.23	20.62
	8H	18.90	19.96	19.33	20.35	20.75	18.86	19.92	19.29	20.31	20.71
	12H	19.02	20.03	19.45	20.41	20.84	18.94	19.95	19.37	20.33	20.76
4H	2H	16.79	18.00	17.19	18.35	18.73	17.08	18.28	17.48	18.63	19.01
	3H	18.61	19.61	19.02	20.01	20.41	18.65	19.65	19.06	20.05	20.45
	4H	19.36	20.26	19.79	20.68	21.12	19.25	20.15	19.69	20.57	21.01
	6H	19.94	20.73	20.40	21.17	21.63	19.74	20.52	20.19	20.96	21.42
	8H	20.15	20.89	20.62	21.33	21.80	19.90	20.63	20.36	21.08	21.54
	12H	20.32	20.97	20.81	21.45	21.93	20.02	20.67	20.50	21.15	21.62
8H	4H	19.64	20.37	20.11	20.82	21.29	19.55	20.29	20.02	20.73	21.20
	6H	20.40	21.00	20.90	21.50	21.98	20.17	20.78	20.67	21.27	21.75
	8H	20.72	21.26	21.24	21.78	22.27	20.42	20.96	20.94	21.47	21.96
	12H	21.01	21.49	21.52	21.98	22.55	20.63	21.11	21.14	21.60	22.17
12H	4H	19.66	20.31	20.15	20.79	21.27	19.59	20.24	20.07	20.72	21.19
	6H	20.46	21.00	20.98	21.51	22.00	20.25	20.79	20.77	21.30	21.79
	8H	20.86	21.34	21.37	21.83	22.40	20.57	21.05	21.08	21.54	22.11