

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: P1058152

Luminaire Tested: S122RDRP-S865D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058152  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D927-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

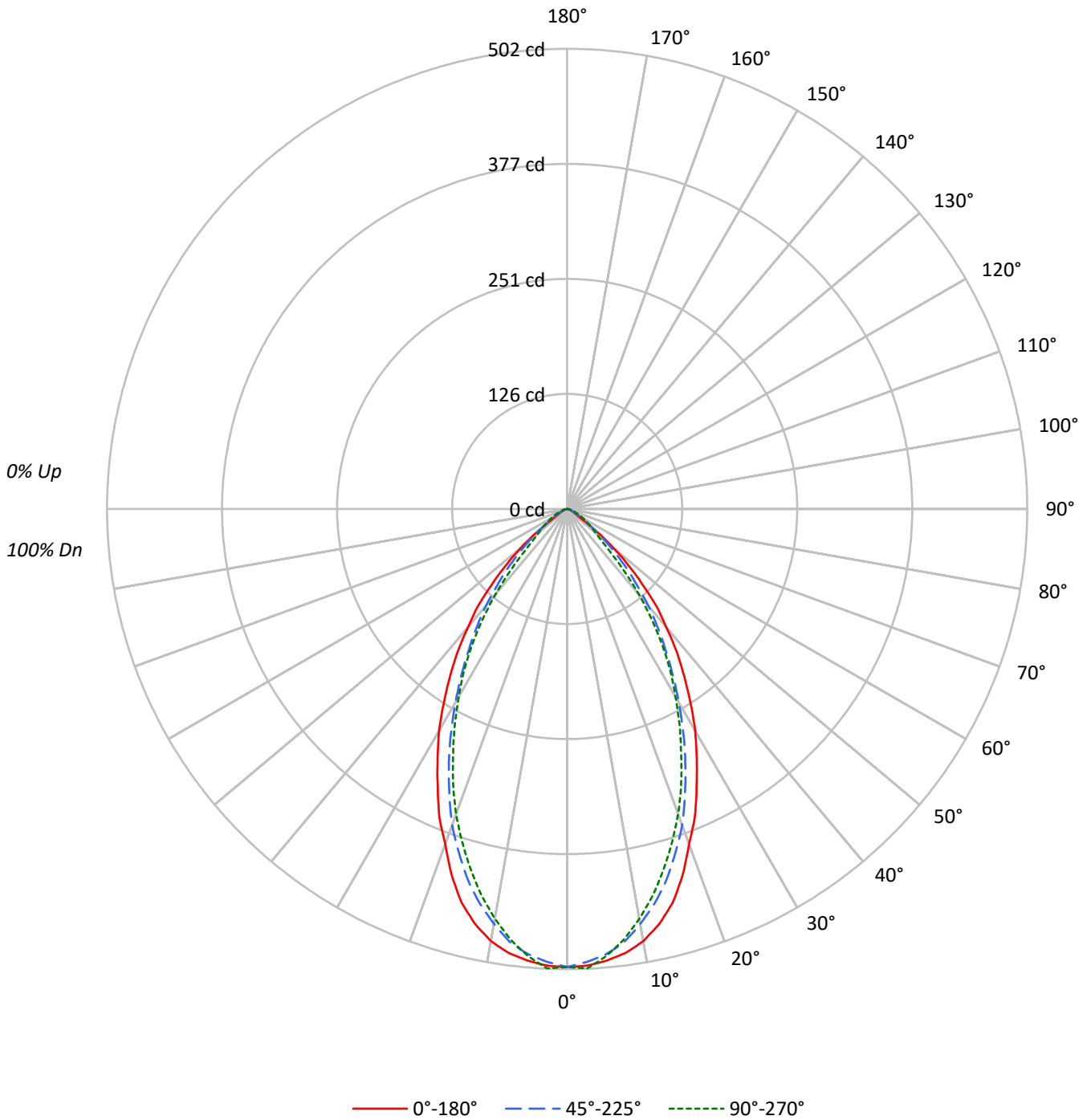
Lumens per Lamp: N/A  
Luminaire Lumens: 537.3 lumens  
Efficiency: N/A  
Efficacy: 15.4 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (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: 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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

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

	0°	45°	90°
0°	9219	9219	9219
5°	9161	9032	9069
10°	8968	8613	8501
15°	8495	8001	7773
20°	7637	7207	6951
25°	6802	6212	5990
30°	5949	5184	5035
35°	5010	4201	4066
40°	4035	3315	2932
45°	3019	2393	1743
50°	1889	1544	1145
55°	640	833	930
60°	369	517	734
65°	262	349	568
70°	216	270	432
75°	143	214	356
80°	106	213	319
85°	0	0	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3019 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	8.6
10°-20°	117.9	21.9
20°-30°	141.9	26.4
30°-40°	121.3	22.6
40°-50°	71.0	13.2
50°-60°	25.7	4.8
60°-70°	9.2	1.7
70°-80°	3.7	0.7
80°-90°	0.6	0.1
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°	305.9	56.9
0°-40°	427.1	79.5
0°-60°	523.9	97.5
0°-90°	537.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	537.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	495	496	488	490	490	47
15°	445	438	419	411	407	123
25°	334	320	305	300	294	153
35°	222	205	186	184	180	139
45°	116	104	92	77	67	89
55°	20	28	26	27	29	25
65°	6	7	8	11	13	6
75°	2	3	3	4	5	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	499.6	499.6	499.6	499.6	499.6
2.5°	498.6	499.6	494.6	499.6	501.6
5°	494.6	495.6	487.6	489.6	489.6
7.5°	488.6	487.6	476.7	474.7	473.7
10°	478.6	475.7	459.7	456.7	453.7
12.5°	463.7	457.7	440.8	435.8	431.8
15°	444.7	437.8	418.8	410.8	406.9
17.5°	418.8	410.8	392.9	384.9	380.9
20°	388.9	380.9	367.0	358.0	354.0
22.5°	364.0	351.0	336.1	330.1	325.1
25°	334.1	320.1	305.1	300.2	294.2
27.5°	306.1	289.2	274.2	270.2	265.3
30°	279.2	261.3	243.3	243.3	236.3
32.5°	250.3	233.3	214.4	213.4	209.4
35°	222.4	205.4	186.5	184.5	180.5
37.5°	196.4	179.5	161.5	155.6	150.6
40°	167.5	152.6	137.6	127.6	121.7
42.5°	144.6	127.6	112.7	100.7	92.7
45°	115.7	103.7	91.7	76.8	66.8
47.5°	89.7	81.8	71.8	54.8	49.9
50°	65.8	61.8	53.8	40.9	39.9
52.5°	41.9	43.9	38.9	31.9	34.9
55°	19.9	27.9	25.9	26.9	28.9
57.5°	13.0	14.0	18.9	21.9	23.9
60°	10.0	10.0	14.0	17.9	19.9
62.5°	8.0	8.0	11.0	15.0	16.0
65°	6.0	7.0	8.0	11.0	13.0
67.5°	5.0	5.0	6.0	9.0	10.0
70°	4.0	4.0	5.0	7.0	8.0
72.5°	3.0	3.0	4.0	6.0	6.0
75°	2.0	3.0	3.0	4.0	5.0
77.5°	2.0	2.0	2.0	3.0	4.0
80°	1.0	1.0	2.0	2.0	3.0
82.5°	1.0	1.0	1.0	1.0	2.0
85°	0.0	0.0	0.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	3.62	4.78	3.99	5.09	5.41	6.99	8.15	7.35	8.46	8.78
	3H	4.14	5.16	4.52	5.49	5.86	7.72	8.74	8.10	9.07	9.44
	4H	4.27	5.22	4.68	5.57	5.96	7.94	8.89	8.34	9.24	9.63
	6H	4.35	5.22	4.77	5.59	5.98	8.09	8.96	8.51	9.33	9.73
	8H	4.35	5.17	4.79	5.56	5.97	8.12	8.94	8.56	9.33	9.74
	12H	4.32	5.10	4.75	5.48	5.91	8.12	8.90	8.56	9.29	9.72
4H	2H	3.93	4.88	4.33	5.23	5.62	6.95	7.90	7.36	8.25	8.64
	3H	4.59	5.36	5.00	5.76	6.17	7.84	8.61	8.25	9.01	9.42
	4H	4.83	5.51	5.27	5.93	6.38	8.12	8.80	8.56	9.23	9.67
	6H	4.95	5.53	5.42	5.98	6.45	8.35	8.93	8.81	9.38	9.85
	8H	4.96	5.51	5.44	5.96	6.43	8.39	8.94	8.87	9.39	9.86
	12H	4.93	5.41	5.42	5.89	6.37	8.41	8.89	8.90	9.38	9.85
8H	4H	4.94	5.48	5.41	5.93	6.40	8.05	8.60	8.52	9.05	9.52
	6H	5.10	5.54	5.61	6.04	6.53	8.31	8.75	8.82	9.25	9.74
	8H	5.15	5.54	5.68	6.06	6.56	8.38	8.77	8.90	9.29	9.78
	12H	5.12	5.47	5.64	5.97	6.55	8.44	8.78	8.95	9.28	9.86
12H	4H	4.92	5.40	5.41	5.89	6.36	8.00	8.48	8.49	8.97	9.44
	6H	5.10	5.50	5.63	6.02	6.51	8.26	8.66	8.79	9.18	9.67
	8H	5.17	5.52	5.69	6.02	6.59	8.35	8.70	8.87	9.19	9.77