

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: P1058179

Luminaire Tested: S122RDRP-S865D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058179
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-S865D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

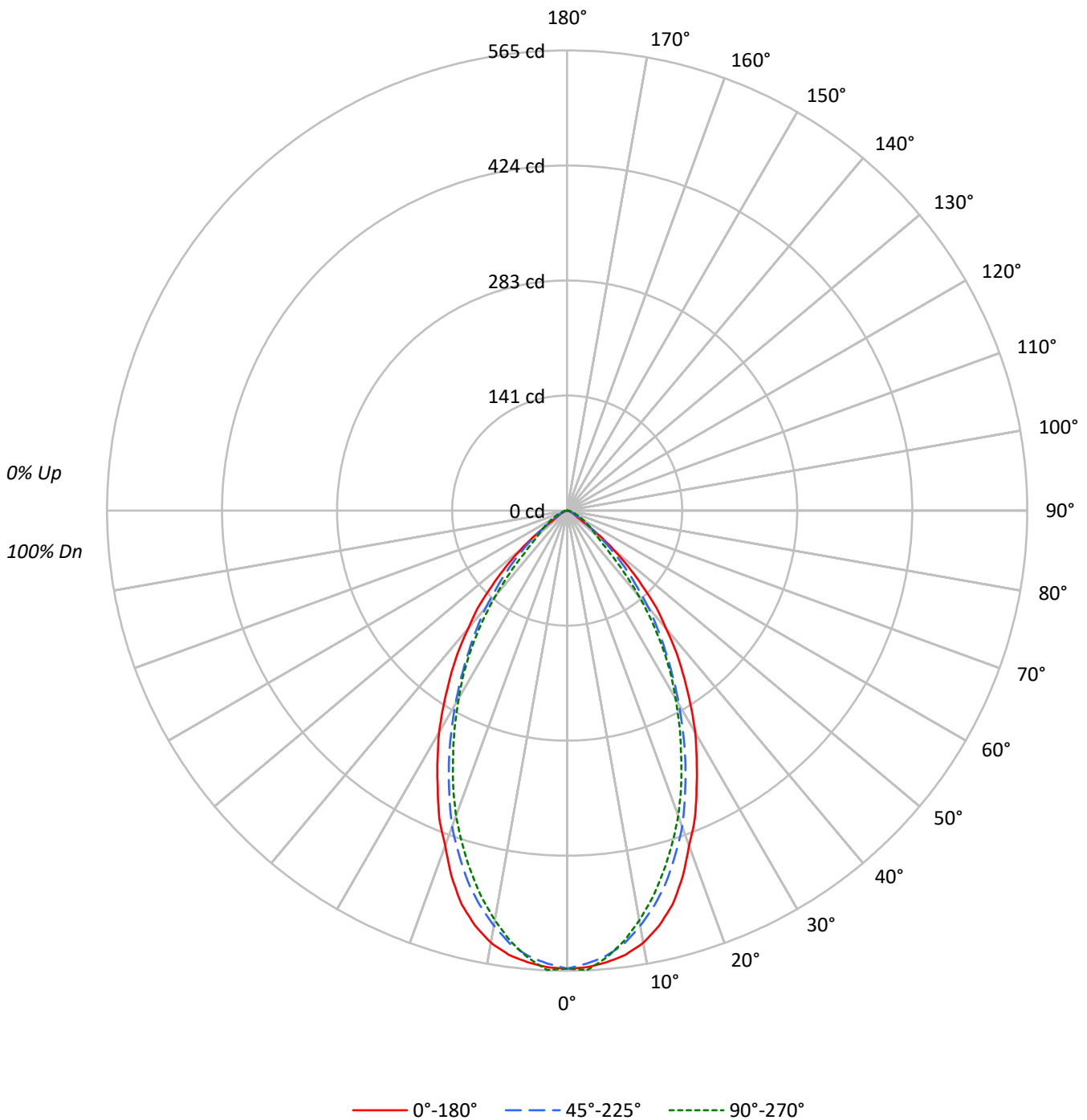
Lumens per Lamp: N/A
Luminaire Lumens: 604.8 lumens
Efficiency: N/A
Efficacy: 17.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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°	10378	10378	10378
5°	10312	10167	10208
10°	10096	9696	9569
15°	9563	9005	8749
20°	8597	8112	7825
25°	7655	6994	6741
30°	6697	5836	5668
35°	5638	4728	4577
40°	4543	3731	3298
45°	3398	2696	1962
50°	2127	1740	1289
55°	721	939	1049
60°	413	579	827
65°	293	393	637
70°	243	302	486
75°	157	242	399
80°	117	234	361
85°	0	0	233

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3398 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	8.6
10°-20°	132.7	21.9
20°-30°	159.8	26.4
30°-40°	136.5	22.6
40°-50°	80.0	13.2
50°-60°	28.9	4.8
60°-70°	10.3	1.7
70°-80°	4.1	0.7
80°-90°	0.7	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°	344.3	56.9
0°-40°	480.8	79.5
0°-60°	589.7	97.5
0°-90°	604.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	604.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	557	558	549	551	551	53
15°	501	493	471	462	458	139
25°	376	360	344	338	331	173
35°	250	231	210	208	203	156
45°	130	117	103	86	75	100
55°	22	31	29	30	33	28
65°	7	8	9	12	15	7
75°	2	3	3	4	6	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°	562.4	562.4	562.4	562.4	562.4
2.5°	561.2	562.4	556.7	562.4	564.6
5°	556.7	557.9	548.9	551.1	551.1
7.5°	550.0	548.9	536.5	534.3	533.2
10°	538.8	535.4	517.5	514.1	510.7
12.5°	521.9	515.2	496.1	490.5	486.0
15°	500.6	492.8	471.4	462.5	458.0
17.5°	471.4	462.5	442.3	433.3	428.8
20°	437.8	428.8	413.1	403.0	398.5
22.5°	409.7	395.1	378.3	371.5	365.9
25°	376.0	360.3	343.5	337.9	331.1
27.5°	344.6	325.5	308.7	304.2	298.6
30°	314.3	294.1	273.9	273.9	266.0
32.5°	281.7	262.7	241.3	240.2	235.7
35°	250.3	231.2	209.9	207.7	203.2
37.5°	221.1	202.0	181.8	175.1	169.5
40°	188.6	171.7	154.9	143.7	136.9
42.5°	162.8	143.7	126.8	113.4	104.4
45°	130.2	116.7	103.3	86.4	75.2
47.5°	101.0	92.0	80.8	61.7	56.1
50°	74.1	69.6	60.6	46.0	44.9
52.5°	47.1	49.4	43.8	35.9	39.3
55°	22.4	31.4	29.2	30.3	32.6
57.5°	14.6	15.7	21.3	24.7	26.9
60°	11.2	11.2	15.7	20.2	22.4
62.5°	9.0	9.0	12.3	16.8	18.0
65°	6.7	7.9	9.0	12.3	14.6
67.5°	5.6	5.6	6.7	10.1	11.2
70°	4.5	4.5	5.6	7.9	9.0
72.5°	3.4	3.4	4.5	6.7	6.7
75°	2.2	3.4	3.4	4.5	5.6
77.5°	2.2	2.2	2.2	3.4	4.5
80°	1.1	1.1	2.2	2.2	3.4
82.5°	1.1	1.1	1.1	1.1	2.2
85°	0.0	0.0	0.0	1.1	1.1
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	4.01	5.17	4.37	5.48	5.80	7.41	8.57	7.77	8.88	9.20
	3H	4.53	5.55	4.91	5.88	6.25	8.14	9.16	8.52	9.49	9.86
	4H	4.66	5.61	5.07	5.96	6.35	8.35	9.30	8.76	9.65	10.04
	6H	4.73	5.60	5.15	5.97	6.36	8.51	9.37	8.92	9.75	10.14
	8H	4.73	5.55	5.17	5.94	6.35	8.54	9.35	8.97	9.74	10.15
	12H	4.70	5.48	5.13	5.86	6.29	8.53	9.31	8.97	9.70	10.13
4H	2H	4.32	5.27	4.72	5.62	6.00	7.38	8.32	7.78	8.68	9.06
	3H	4.98	5.75	5.39	6.15	6.56	8.25	9.02	8.67	9.43	9.83
	4H	5.22	5.90	5.66	6.33	6.77	8.53	9.22	8.97	9.64	10.08
	6H	5.33	5.92	5.80	6.37	6.84	8.76	9.34	9.23	9.79	10.26
	8H	5.34	5.89	5.82	6.34	6.81	8.80	9.35	9.27	9.80	10.27
	12H	5.31	5.79	5.80	6.27	6.75	8.82	9.30	9.31	9.78	10.26
8H	4H	5.33	5.87	5.80	6.32	6.80	8.46	9.01	8.94	9.46	9.93
	6H	5.48	5.92	5.99	6.42	6.91	8.72	9.16	9.23	9.66	10.15
	8H	5.52	5.92	6.05	6.44	6.93	8.78	9.18	9.31	9.69	10.19
	12H	5.50	5.85	6.02	6.35	6.92	8.84	9.18	9.36	9.68	10.26
12H	4H	5.31	5.79	5.80	6.28	6.75	8.41	8.89	8.90	9.38	9.85
	6H	5.48	5.88	6.01	6.39	6.89	8.67	9.07	9.20	9.59	10.08
	8H	5.55	5.90	6.07	6.39	6.97	8.75	9.10	9.27	9.60	10.17