

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



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: P1058267

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

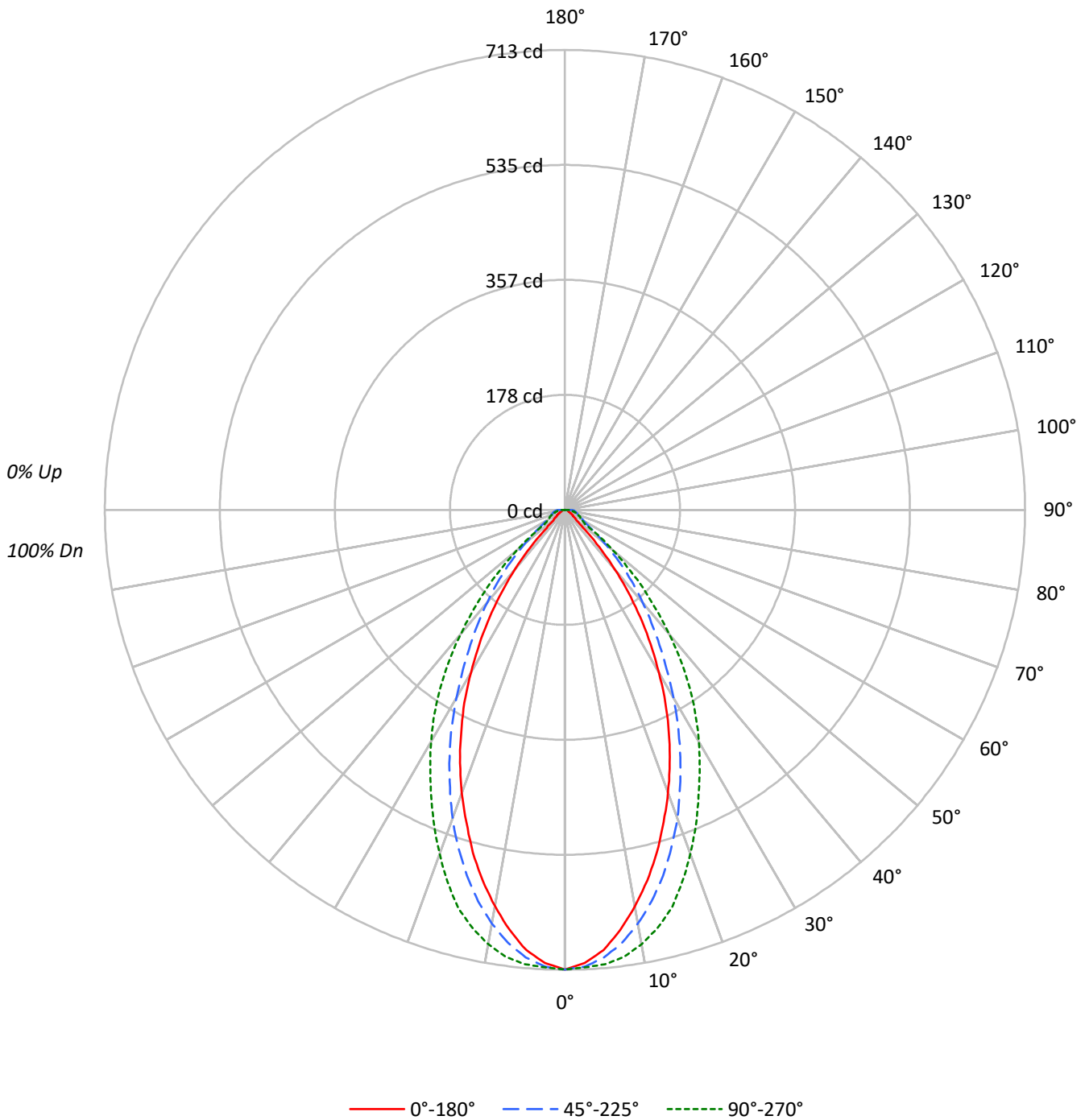
Lumens per Lamp: N/A
Luminaire Lumens: 768.3 lumens
Efficiency: N/A
Efficacy: 21.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13151	13151	13151
5°	12696	12898	13099
10°	11692	12203	12816
15°	10511	11216	12207
20°	9168	10001	11154
25°	7755	8618	9980
30°	6196	7157	8845
35°	4582	5751	7596
40°	2893	4507	6051
45°	1140	3385	4455
50°	588	2274	2744
55°	483	1493	1229
60°	354	1210	1107
65°	297	1131	1131
70°	297	1176	1106
75°	392	1362	1169
80°	584	1743	1307
85°	868	2901	1736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5796 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	8.5
10°-20°	164.7	21.4
20°-30°	195.7	25.5
30°-40°	162.8	21.2
40°-50°	90.9	11.8
50°-60°	36.7	4.8
60°-70°	23.5	3.1
70°-80°	17.6	2.3
80°-90°	11.2	1.5
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°	425.5	55.4
0°-40°	588.3	76.6
0°-60°	715.9	93.2
0°-90°	768.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	768.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	685	698	696	702	707	63
15°	550	567	587	617	639	153
25°	381	396	423	456	490	174
35°	203	222	255	298	337	126
45°	44	74	130	152	171	41
55°	15	31	46	45	38	13
65°	7	27	26	25	26	7
75°	6	19	19	18	16	6
85°	4	12	14	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.7	712.7	712.7	712.7	712.7
2.5°	703.1	714.1	708.6	708.6	710.0
5°	685.4	697.7	696.3	701.8	707.2
7.5°	656.7	670.4	677.2	689.5	699.0
10°	624.0	639.0	651.3	670.4	684.0
12.5°	588.5	603.5	621.2	645.8	663.6
15°	550.2	566.6	587.1	617.1	639.0
17.5°	507.9	525.7	548.9	581.6	604.8
20°	466.9	484.7	509.3	542.0	568.0
22.5°	424.6	439.6	465.6	498.3	529.7
25°	380.9	395.9	423.3	456.0	490.2
27.5°	337.2	352.3	379.6	413.7	451.9
30°	290.8	307.2	335.9	374.1	415.1
32.5°	247.1	263.5	293.5	335.9	376.8
35°	203.4	222.5	255.3	297.6	337.2
37.5°	161.1	183.0	219.8	259.4	294.9
40°	120.1	143.4	187.1	221.2	251.2
42.5°	79.2	106.5	157.0	185.7	208.9
45°	43.7	73.7	129.7	151.6	170.7
47.5°	24.6	47.8	102.4	120.1	131.1
50°	20.5	35.5	79.2	91.5	95.6
52.5°	16.4	32.8	60.1	66.9	64.2
55°	15.0	31.4	46.4	45.1	38.2
57.5°	12.3	31.4	36.9	32.8	32.8
60°	9.6	30.0	32.8	28.7	30.0
62.5°	8.2	28.7	30.0	27.3	27.3
65°	6.8	27.3	25.9	24.6	25.9
67.5°	5.5	24.6	24.6	23.2	23.2
70°	5.5	23.2	21.8	20.5	20.5
72.5°	5.5	20.5	20.5	19.1	19.1
75°	5.5	19.1	19.1	17.7	16.4
77.5°	5.5	16.4	17.7	16.4	15.0
80°	5.5	15.0	16.4	15.0	12.3
82.5°	5.5	13.7	15.0	13.7	10.9
85°	4.1	12.3	13.7	12.3	8.2
87.5°	4.1	12.3	13.7	10.9	6.8
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	7.32	8.54	7.68	8.85	9.16	8.40	9.62	8.76	9.93	10.25
	3H	8.65	9.74	9.03	10.07	10.43	10.43	11.51	10.81	11.84	12.21
	4H	9.23	10.24	9.63	10.59	10.98	11.38	12.39	11.78	12.74	13.13
	6H	9.80	10.73	10.21	11.10	11.49	12.32	13.25	12.74	13.63	14.02
	8H	10.13	11.01	10.56	11.40	11.80	12.77	13.65	13.21	14.04	14.45
	12H	10.43	11.28	10.87	11.66	12.09	13.20	14.04	13.63	14.42	14.85
4H	2H	8.28	9.29	8.68	9.64	10.02	9.07	10.08	9.48	10.43	10.82
	3H	10.31	11.14	10.72	11.55	11.95	11.35	12.19	11.77	12.59	13.00
	4H	11.39	12.14	11.82	12.56	13.00	12.50	13.25	12.93	13.67	14.11
	6H	12.26	12.91	12.73	13.36	13.83	13.67	14.32	14.13	14.76	15.23
	8H	12.68	13.28	13.15	13.73	14.20	14.23	14.84	14.70	15.28	15.76
	12H	13.06	13.59	13.55	14.08	14.55	14.78	15.31	15.26	15.79	16.27
8H	4H	12.16	12.76	12.63	13.21	13.68	13.05	13.65	13.52	14.10	14.57
	6H	13.50	14.00	14.00	14.49	14.98	14.50	15.00	15.01	15.50	15.98
	8H	14.22	14.67	14.74	15.18	15.68	15.27	15.72	15.79	16.23	16.73
	12H	14.91	15.31	15.43	15.80	16.38	16.06	16.45	16.57	16.95	17.52
12H	4H	12.31	12.85	12.80	13.33	13.81	13.16	13.69	13.64	14.17	14.65
	6H	13.82	14.27	14.35	14.78	15.28	14.73	15.18	15.25	15.69	16.19
	8H	14.73	15.12	15.24	15.62	16.19	15.64	16.03	16.16	16.53	17.10