

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: P1058433

Luminaire Tested: S122RDRP-H485D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H485D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

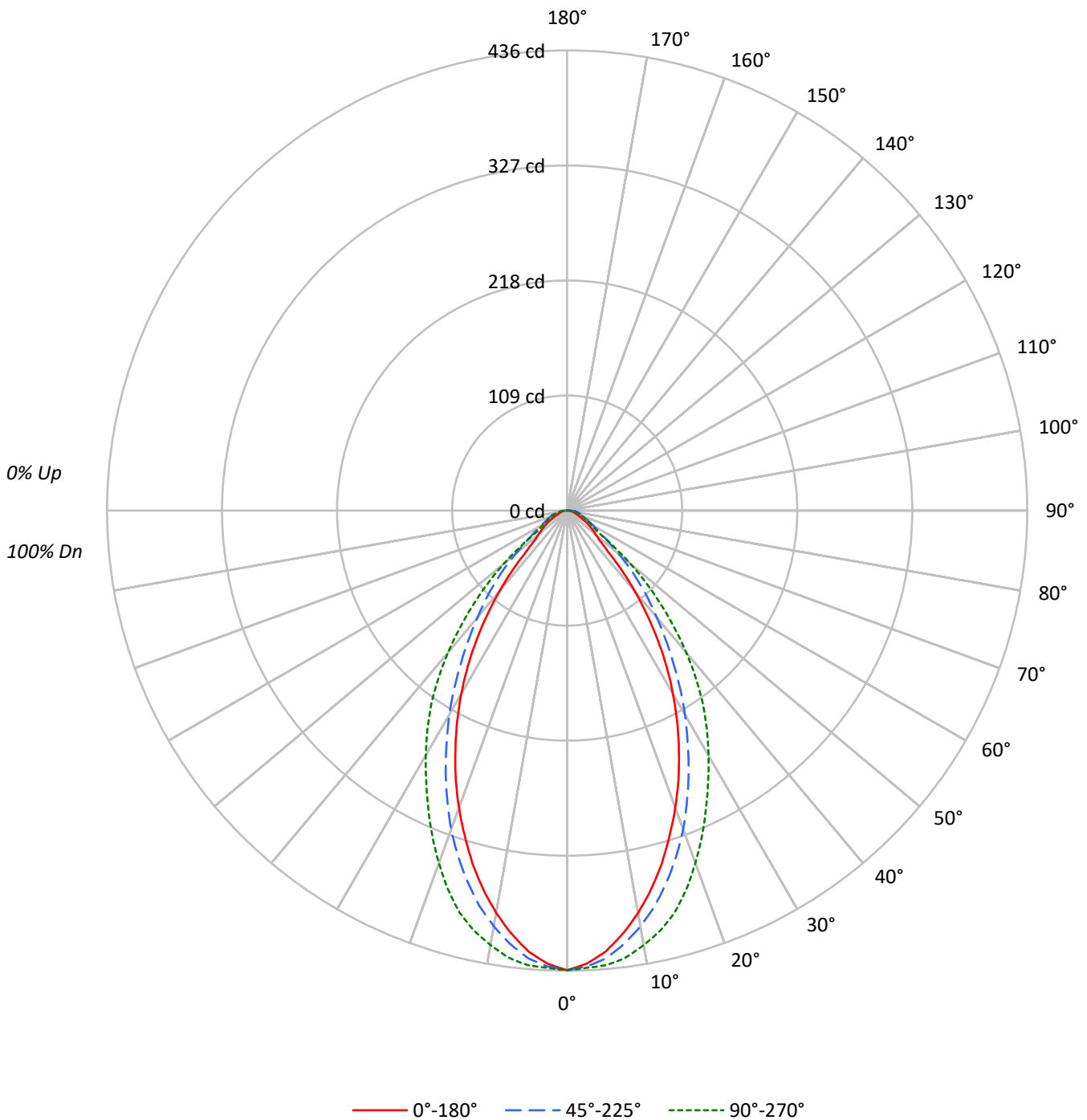
Lumens per Lamp: N/A
Luminaire Lumens: 528.3 lumens
Efficiency: N/A
Efficacy: 30.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8036	8036	8036
5°	7767	7887	8007
10°	7251	7493	7832
15°	6614	6959	7529
20°	5883	6315	6977
25°	5098	5546	6338
30°	4274	4758	5708
35°	3368	3935	5057
40°	2402	3180	4225
45°	1420	2516	3275
50°	1022	1820	2231
55°	853	1313	1123
60°	694	1052	956
65°	563	934	878
70°	491	906	836
75°	463	920	827
80°	478	1105	893
85°	677	1778	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3275 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	7.6
10°-20°	102.6	19.4
20°-30°	126.6	24.0
30°-40°	112.6	21.3
40°-50°	71.9	13.6
50°-60°	34.5	6.5
60°-70°	20.3	3.8
70°-80°	12.9	2.4
80°-90°	6.9	1.3
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°	269.2	51.0
0°-40°	381.8	72.3
0°-60°	488.2	92.4
0°-90°	528.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	528.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	419	427	426	428	432	39
15°	346	355	364	381	394	97
25°	250	260	272	292	311	115
35°	150	161	175	201	224	93
45°	54	70	96	112	126	46
55°	26	34	41	40	35	24
65°	13	23	21	19	20	13
75°	6	14	13	12	12	7
85°	3	8	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	435.5	435.5	435.5	435.5	435.5
2.5°	429.7	436.8	432.3	432.3	433.6
5°	419.3	427.1	425.8	428.4	432.3
7.5°	404.4	412.9	414.1	421.3	427.1
10°	387.0	396.0	399.9	410.3	418.0
12.5°	367.6	376.6	383.7	396.7	407.7
15°	346.2	354.6	364.3	381.1	394.1
17.5°	322.9	333.9	343.6	361.1	376.0
20°	299.6	310.0	321.6	338.4	355.3
22.5°	275.7	285.4	297.0	314.5	333.9
25°	250.4	260.1	272.4	291.8	311.3
27.5°	225.8	235.5	247.2	268.5	289.3
30°	200.6	210.3	223.3	245.3	267.9
32.5°	175.4	185.7	198.7	222.6	246.5
35°	149.5	161.1	174.7	201.3	224.5
37.5°	124.2	135.9	152.7	178.6	200.6
40°	99.7	113.2	132.0	155.3	175.4
42.5°	75.7	90.6	113.9	132.7	150.1
45°	54.4	70.5	96.4	111.9	125.5
47.5°	41.4	53.1	79.6	91.9	101.6
50°	35.6	42.7	63.4	72.5	77.7
52.5°	31.1	37.5	50.5	55.0	55.0
55°	26.5	34.3	40.8	39.5	34.9
57.5°	22.6	31.1	33.6	28.5	29.8
60°	18.8	28.5	28.5	25.2	25.9
62.5°	15.5	26.5	24.6	22.0	22.6
65°	12.9	23.3	21.4	19.4	20.1
67.5°	10.4	20.7	18.8	17.5	17.5
70°	9.1	18.8	16.8	15.5	15.5
72.5°	7.8	16.2	14.9	13.6	13.6
75°	6.5	14.2	12.9	12.3	11.6
77.5°	5.8	12.3	11.6	10.4	9.7
80°	4.5	10.4	10.4	9.7	8.4
82.5°	3.9	9.1	9.1	8.4	7.1
85°	3.2	7.8	8.4	7.1	5.2
87.5°	2.6	7.1	7.1	5.8	3.9
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	8.92	10.19	9.28	10.51	10.82	8.71	9.98	9.07	10.30	10.61
	3H	10.15	11.29	10.53	11.62	11.98	10.30	11.43	10.68	11.76	12.13
	4H	10.60	11.66	11.01	12.01	12.40	11.01	12.07	11.42	12.42	12.81
	6H	10.98	11.96	11.40	12.33	12.72	11.66	12.64	12.08	13.01	13.40
	8H	11.14	12.06	11.57	12.45	12.86	11.99	12.91	12.42	13.30	13.71
	12H	11.29	12.18	11.73	12.56	12.99	12.29	13.17	12.72	13.56	13.99
4H	2H	9.47	10.53	9.87	10.88	11.26	9.30	10.36	9.71	10.71	11.10
	3H	11.16	12.04	11.58	12.44	12.84	11.14	12.01	11.55	12.41	12.81
	4H	11.96	12.74	12.39	13.16	13.60	12.01	12.79	12.44	13.21	13.65
	6H	12.60	13.28	13.06	13.72	14.19	12.85	13.53	13.32	13.98	14.44
	8H	12.85	13.48	13.32	13.93	14.40	13.27	13.91	13.74	14.36	14.83
	12H	13.10	13.66	13.58	14.14	14.61	13.68	14.24	14.16	14.72	15.19
8H	4H	12.37	13.01	12.84	13.45	13.92	12.42	13.06	12.89	13.50	13.98
	6H	13.35	13.87	13.85	14.37	14.85	13.51	14.03	14.01	14.53	15.01
	8H	13.85	14.31	14.37	14.83	15.32	14.10	14.57	14.62	15.08	15.58
	12H	14.35	14.76	14.86	15.26	15.83	14.70	15.11	15.22	15.61	16.18
12H	4H	12.44	13.00	12.93	13.48	13.96	12.50	13.06	12.99	13.54	14.02
	6H	13.52	13.99	14.04	14.50	15.00	13.68	14.14	14.20	14.66	15.15
	8H	14.16	14.57	14.68	15.07	15.64	14.39	14.80	14.90	15.29	15.87