

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: P1058106

Luminaire Tested: S122RDRP-S675D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058106
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

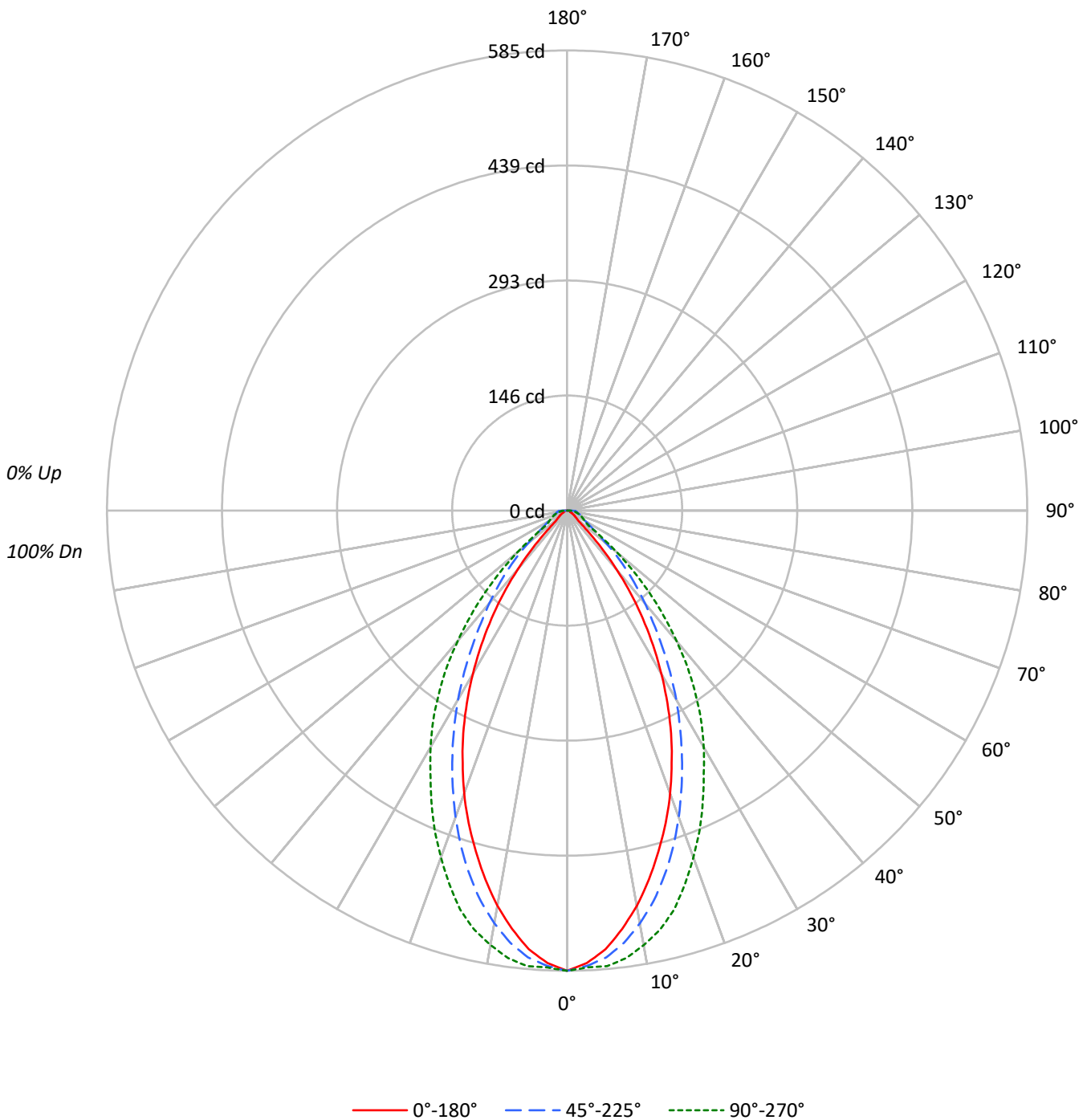
Lumens per Lamp: N/A
Luminaire Lumens: 636.8 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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	76	81	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	67	64	71	66	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56																												
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45																												
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10795	10795	10795
5°	10369	10560	10767
10°	9560	9979	10506
15°	8566	9156	10031
20°	7519	8143	9210
25°	6365	7032	8309
30°	5105	5904	7400
35°	3775	4724	6411
40°	2368	3698	5208
45°	929	2784	3860
50°	456	1880	2365
55°	360	1235	1055
60°	277	1000	967
65°	205	939	939
70°	254	960	960
75°	264	1069	998
80°	393	1392	1095
85°	783	2371	1588

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4357 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	8.4
10°-20°	135.1	21.2
20°-30°	161.6	25.4
30°-40°	136.0	21.4
40°-50°	77.4	12.2
50°-60°	30.5	4.8
60°-70°	19.2	3.0
70°-80°	14.3	2.2
80°-90°	9.1	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°	350.1	55.0
0°-40°	486.2	76.3
0°-60°	594.2	93.3
0°-90°	636.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	636.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	560	572	570	577	581	52
15°	448	464	479	507	525	125
25°	313	327	345	381	408	142
35°	168	182	210	255	285	104
45°	36	63	107	134	148	34
55°	11	24	38	39	33	10
65°	5	22	22	21	22	5
75°	4	15	15	14	14	4
85°	4	10	11	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	585.0	585.0	585.0	585.0	585.0
2.5°	575.7	586.0	579.4	580.4	581.3
5°	559.8	571.9	570.1	576.6	581.3
7.5°	536.4	549.5	554.2	565.4	573.8
10°	510.2	525.1	532.6	550.4	560.7
12.5°	480.2	497.1	508.3	530.8	545.7
15°	448.4	464.3	479.3	507.4	525.1
17.5°	416.6	432.5	448.4	479.3	498.0
20°	382.9	397.8	414.7	447.4	469.0
22.5°	347.3	363.2	380.0	413.7	440.0
25°	312.6	326.7	345.4	381.0	408.1
27.5°	276.1	290.2	310.8	347.3	376.3
30°	239.6	253.7	277.1	314.5	347.3
32.5°	203.1	218.1	243.4	284.6	317.3
35°	167.6	182.5	209.7	254.6	284.6
37.5°	132.9	149.8	179.7	223.7	251.8
40°	98.3	117.9	153.5	192.8	216.2
42.5°	65.5	89.9	129.2	161.9	181.6
45°	35.6	62.7	106.7	133.9	147.9
47.5°	19.7	40.3	85.2	106.7	115.1
50°	15.9	28.1	65.5	81.4	82.4
52.5°	13.1	25.3	48.7	58.0	53.4
55°	11.2	24.3	38.4	39.3	32.8
57.5°	9.4	23.4	31.8	28.1	28.1
60°	7.5	23.4	27.1	25.3	26.2
62.5°	5.6	23.4	24.3	22.5	23.4
65°	4.7	21.5	21.5	20.6	21.5
67.5°	4.7	19.7	19.7	18.7	19.7
70°	4.7	18.7	17.8	17.8	17.8
72.5°	3.7	16.8	16.8	15.9	15.9
75°	3.7	15.0	15.0	14.0	14.0
77.5°	3.7	14.0	14.0	13.1	12.2
80°	3.7	12.2	13.1	12.2	10.3
82.5°	3.7	11.2	12.2	11.2	8.4
85°	3.7	10.3	11.2	10.3	7.5
87.5°	2.8	10.3	10.3	8.4	5.6
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	5.96	7.18	6.32	7.49	7.81	7.99	9.21	8.35	9.52	9.83
	3H	7.51	8.59	7.89	8.92	9.29	9.96	11.04	10.34	11.38	11.74
	4H	8.06	9.07	8.46	9.42	9.80	10.87	11.88	11.27	12.23	12.62
	6H	8.61	9.54	9.02	9.91	10.30	11.75	12.68	12.17	13.06	13.45
	8H	8.90	9.78	9.33	10.17	10.57	12.16	13.04	12.59	13.43	13.84
	12H	9.25	10.09	9.68	10.48	10.91	12.60	13.44	13.03	13.82	14.25
4H	2H	7.14	8.15	7.55	8.50	8.89	8.60	9.61	9.01	9.97	10.35
	3H	9.34	10.18	9.76	10.58	10.98	10.85	11.68	11.26	12.09	12.49
	4H	10.40	11.14	10.83	11.56	12.01	11.91	12.66	12.35	13.08	13.53
	6H	11.29	11.93	11.75	12.38	12.85	13.03	13.68	13.49	14.12	14.59
	8H	11.67	12.27	12.14	12.72	13.19	13.55	14.16	14.02	14.60	15.08
	12H	12.09	12.62	12.57	13.10	13.58	14.13	14.66	14.61	15.14	15.62
8H	4H	11.20	11.80	11.67	12.25	12.72	12.41	13.01	12.88	13.46	13.93
	6H	12.58	13.07	13.08	13.57	14.05	13.81	14.30	14.31	14.80	15.28
	8H	13.29	13.74	13.82	14.25	14.75	14.54	14.99	15.07	15.51	16.00
	12H	14.04	14.43	14.56	14.93	15.50	15.38	15.77	15.89	16.27	16.84
12H	4H	11.36	11.89	11.85	12.38	12.85	12.51	13.04	12.99	13.53	14.00
	6H	12.91	13.35	13.43	13.87	14.36	14.03	14.47	14.55	14.99	15.48
	8H	13.82	14.21	14.34	14.71	15.28	14.91	15.30	15.42	15.80	16.37