

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: P1057867

Luminaire Tested: S122RDRP-S1005D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

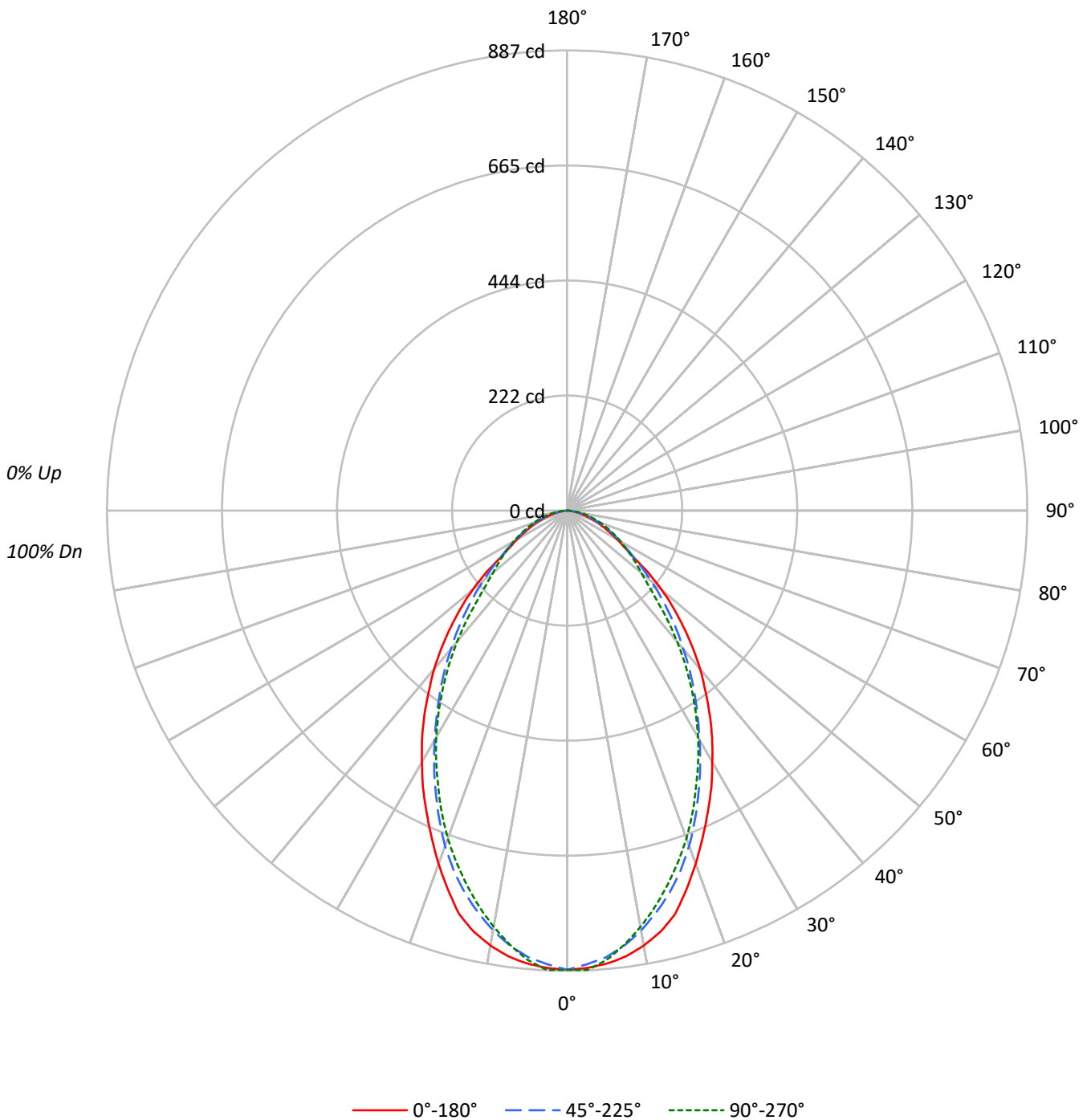
Lumens per Lamp: N/A
Luminaire Lumens: 1344.3 lumens
Efficiency: N/A
Efficacy: 32.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	
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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16332	16332	16332
5°	16239	16004	16108
10°	15951	15396	15265
15°	15374	14566	14270
20°	14227	13506	13202
25°	13057	12196	11966
30°	11923	10871	10752
35°	10795	9621	9398
40°	9609	8385	7944
45°	8275	7210	6362
50°	6838	6069	5339
55°	4941	5035	4806
60°	4108	4318	4370
65°	3506	3755	3999
70°	2892	3345	3653
75°	2410	2816	3315
80°	1796	2242	2997
85°	593	1186	2689

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8275 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	6.1
10°-20°	215.5	16.0
20°-30°	278.9	20.7
30°-40°	273.5	20.3
40°-50°	215.4	16.0
50°-60°	141.2	10.5
60°-70°	85.9	6.4
70°-80°	42.9	3.2
80°-90°	9.2	0.7
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°	576.1	42.9
0°-40°	849.6	63.2
0°-60°	1206.1	89.7
0°-90°	1344.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1344.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	877	877	864	870	870	83
15°	805	794	762	753	747	224
25°	641	620	599	596	588	295
35°	479	452	427	426	417	299
45°	317	297	276	256	244	244
55°	154	162	156	151	149	146
65°	80	82	86	90	92	80
75°	34	35	40	45	46	36
85°	3	4	6	10	13	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.1	885.1	885.1	885.1	885.1
2.5°	882.3	883.7	875.3	883.7	886.6
5°	876.7	876.7	864.0	869.6	869.6
7.5°	866.8	865.4	845.7	845.7	844.3
10°	851.3	845.7	821.7	817.5	814.7
12.5°	831.6	821.7	793.5	786.5	782.3
15°	804.8	793.5	762.5	752.7	747.0
17.5°	765.3	754.1	727.3	716.0	710.4
20°	724.5	707.6	687.8	678.0	672.3
22.5°	682.2	662.4	644.1	637.1	631.4
25°	641.3	620.2	599.0	596.2	587.7
27.5°	601.8	576.5	555.3	553.9	546.9
30°	559.6	532.8	510.2	511.6	504.6
32.5°	520.1	494.7	467.9	469.4	460.9
35°	479.2	452.4	427.1	425.7	417.2
37.5°	436.9	411.6	387.6	382.0	373.5
40°	398.9	373.5	348.1	338.3	329.8
42.5°	358.0	335.5	312.9	297.4	286.1
45°	317.1	297.4	276.3	256.5	243.8
47.5°	277.7	262.2	243.8	219.9	211.4
50°	238.2	226.9	211.4	190.3	186.0
52.5°	197.3	193.1	183.2	169.1	167.7
55°	153.6	162.1	156.5	150.8	149.4
57.5°	129.7	131.1	135.3	133.9	133.9
60°	111.3	111.3	117.0	118.4	118.4
62.5°	94.4	95.8	101.5	104.3	104.3
65°	80.3	81.7	86.0	90.2	91.6
67.5°	66.2	69.1	73.3	77.5	78.9
70°	53.6	56.4	62.0	66.2	67.7
72.5°	43.7	45.1	50.7	55.0	56.4
75°	33.8	35.2	39.5	45.1	46.5
77.5°	24.0	26.8	31.0	35.2	38.1
80°	16.9	18.3	21.1	26.8	28.2
82.5°	9.9	11.3	14.1	18.3	19.7
85°	2.8	4.2	5.6	9.9	12.7
87.5°	0.0	0.0	0.0	2.8	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	15.83	17.22	16.19	17.54	17.85	16.01	17.40	16.37	17.72	18.03
	3H	16.96	18.21	17.34	18.53	18.90	17.47	18.71	17.84	19.04	19.40
	4H	17.31	18.47	17.71	18.82	19.21	18.01	19.17	18.41	19.52	19.90
	6H	17.50	18.57	17.91	18.94	19.33	18.42	19.49	18.84	19.86	20.25
	8H	17.52	18.54	17.95	18.93	19.33	18.55	19.56	18.98	19.96	20.36
	12H	17.51	18.48	17.94	18.86	19.29	18.63	19.60	19.06	19.99	20.42
4H	2H	16.29	17.45	16.69	17.80	18.18	16.43	17.60	16.83	17.95	18.33
	3H	17.63	18.58	18.04	18.99	19.39	18.10	19.06	18.52	19.46	19.87
	4H	18.07	18.93	18.50	19.35	19.79	18.77	19.63	19.20	20.05	20.49
	6H	18.34	19.08	18.80	19.53	19.99	19.30	20.05	19.77	20.49	20.96
	8H	18.39	19.08	18.85	19.52	19.99	19.47	20.17	19.94	20.61	21.08
	12H	18.38	19.00	18.86	19.48	19.95	19.59	20.21	20.08	20.69	21.16
8H	4H	18.28	18.98	18.75	19.42	19.89	18.92	19.61	19.39	20.06	20.53
	6H	18.63	19.20	19.13	19.69	20.17	19.55	20.12	20.05	20.61	21.09
	8H	18.71	19.22	19.23	19.73	20.22	19.78	20.29	20.30	20.81	21.30
	12H	18.72	19.17	19.24	19.67	20.24	19.97	20.42	20.48	20.91	21.48
12H	4H	18.29	18.91	18.78	19.39	19.86	18.90	19.52	19.39	20.00	20.47
	6H	18.65	19.16	19.17	19.68	20.17	19.54	20.06	20.06	20.57	21.06
	8H	18.77	19.22	19.28	19.71	20.28	19.82	20.27	20.33	20.76	21.33