

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: P1058193

Luminaire Tested: S122RDRP-S865D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

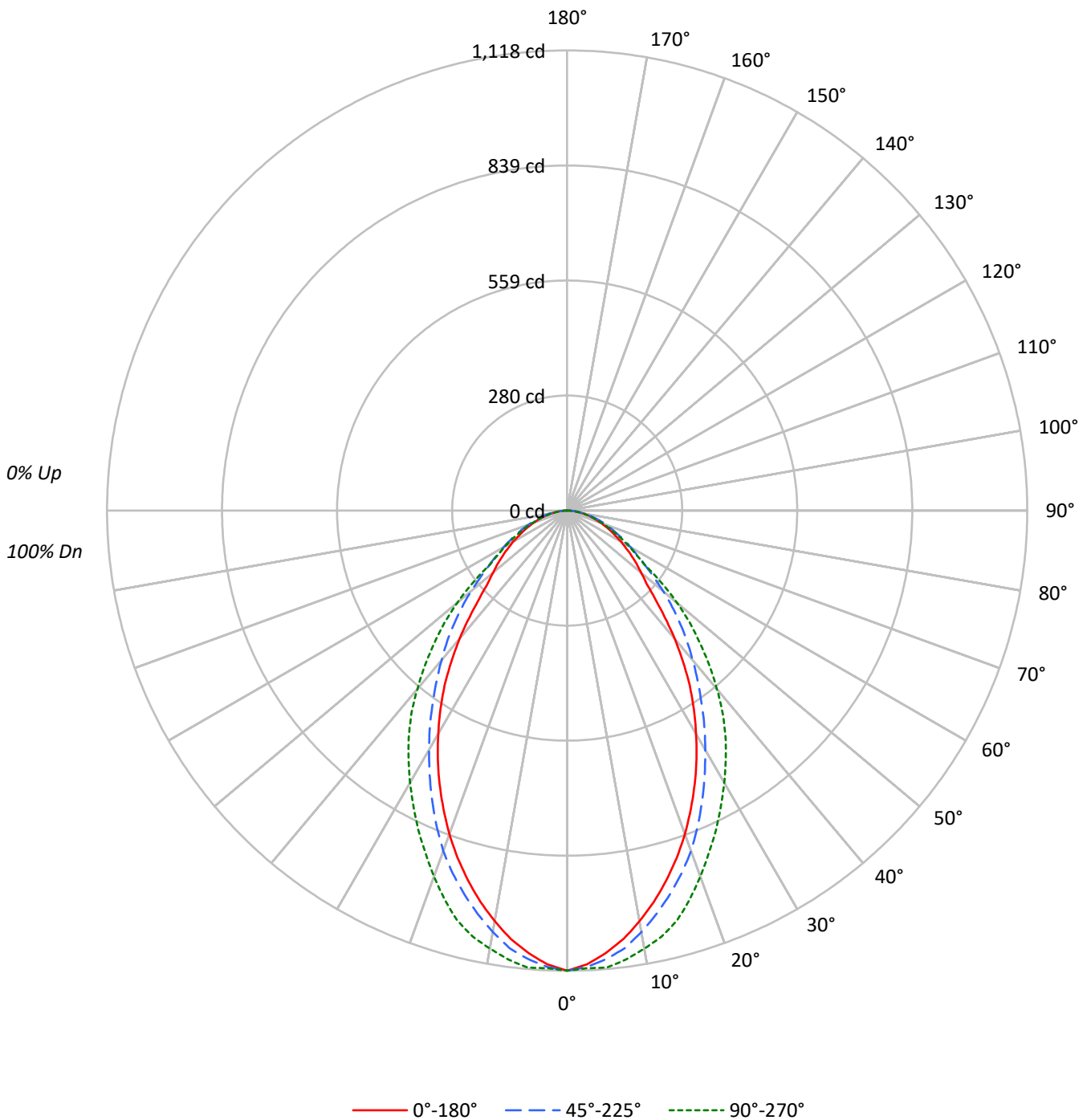
Lumens per Lamp: N/A
Luminaire Lumens: 1822.3 lumens
Efficiency: N/A
Efficacy: 52.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (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	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20626	20626	20626
5°	19992	20259	20638
10°	18984	19479	20245
15°	17772	18437	19699
20°	16426	17276	18574
25°	14928	15808	17424
30°	13342	14291	16262
35°	11696	12806	15108
40°	9785	11437	13636
45°	7842	10130	11918
50°	6729	8730	10007
55°	6148	7425	7386
60°	5587	6565	6433
65°	5091	5877	5615
70°	4667	5384	4991
75°	4370	4969	4370
80°	4091	4601	3836
85°	4065	4827	3303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11918 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	5.7
10°-20°	273.2	15.0
20°-30°	360.3	19.8
30°-40°	362.8	19.9
40°-50°	295.3	16.2
50°-60°	201.3	11.0
60°-70°	130.7	7.2
70°-80°	72.0	3.9
80°-90°	23.5	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°	736.7	40.4
0°-40°	1099.5	60.3
0°-60°	1596.1	87.6
0°-90°	1822.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1822.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1079	1100	1094	1103	1114	101
15°	930	954	965	1005	1031	261
25°	733	757	776	811	856	336
35°	519	546	568	618	671	322
45°	300	338	388	422	457	237
55°	191	210	231	232	230	171
65°	117	138	135	127	129	116
75°	61	76	70	62	61	65
85°	19	25	23	18	16	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1117.8	1117.8	1117.8	1117.8	1117.8
2.5°	1103.3	1121.4	1109.4	1110.6	1113.0
5°	1079.3	1099.7	1093.7	1103.3	1114.2
7.5°	1049.3	1069.7	1072.1	1086.5	1099.7
10°	1013.2	1036.0	1039.6	1061.3	1080.5
12.5°	973.5	998.8	1003.6	1034.8	1060.1
15°	930.3	954.3	965.1	1004.8	1031.2
17.5°	884.6	907.4	924.3	960.3	990.4
20°	836.5	858.2	879.8	912.2	945.9
22.5°	784.8	808.9	829.3	861.8	900.2
25°	733.2	757.2	776.4	811.3	855.8
27.5°	680.3	704.3	723.5	760.8	808.9
30°	626.2	651.4	670.7	712.7	763.2
32.5°	573.3	598.5	620.2	664.7	717.5
35°	519.2	545.7	568.5	617.8	670.7
37.5°	461.5	491.6	520.4	569.7	621.4
40°	406.2	439.9	474.8	520.4	566.1
42.5°	351.0	388.2	431.5	469.9	512.0
45°	300.5	337.7	388.2	421.9	456.7
47.5°	260.8	292.1	346.1	373.8	405.0
50°	234.4	256.0	304.1	325.7	348.6
52.5°	212.7	230.8	264.4	278.8	290.9
55°	191.1	210.3	230.8	232.0	229.6
57.5°	169.5	191.1	201.9	193.5	198.3
60°	151.4	173.1	177.9	169.5	174.3
62.5°	132.2	156.2	156.2	147.8	150.2
65°	116.6	138.2	134.6	127.4	128.6
67.5°	101.0	122.6	116.6	109.4	109.4
70°	86.5	107.0	99.8	92.5	92.5
72.5°	73.3	90.1	85.3	76.9	75.7
75°	61.3	75.7	69.7	62.5	61.3
77.5°	49.3	61.3	56.5	50.5	48.1
80°	38.5	49.3	43.3	38.5	36.1
82.5°	28.8	37.3	32.5	27.6	25.2
85°	19.2	25.2	22.8	18.0	15.6
87.5°	9.6	16.8	14.4	12.0	9.6
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	17.23	18.67	17.60	18.99	19.30	17.48	18.92	17.85	19.23	19.55
	3H	18.76	20.05	19.14	20.38	20.74	18.84	20.13	19.22	20.45	20.82
	4H	19.32	20.53	19.73	20.88	21.26	19.32	20.53	19.72	20.88	21.26
	6H	19.75	20.86	20.16	21.23	21.62	19.67	20.78	20.08	21.15	21.54
	8H	19.90	20.96	20.33	21.35	21.75	19.78	20.83	20.21	21.22	21.63
	12H	20.01	21.03	20.45	21.41	21.84	19.85	20.86	20.28	21.24	21.67
4H	2H	17.81	19.01	18.21	19.36	19.74	18.00	19.21	18.40	19.56	19.94
	3H	19.61	20.61	20.02	21.01	21.41	19.58	20.58	19.99	20.98	21.38
	4H	20.35	21.25	20.79	21.67	22.11	20.17	21.07	20.61	21.49	21.93
	6H	20.94	21.72	21.40	22.16	22.62	20.64	21.42	21.10	21.87	22.33
	8H	21.15	21.88	21.61	22.32	22.79	20.79	21.52	21.26	21.97	22.44
	12H	21.31	21.96	21.80	22.44	22.92	20.90	21.55	21.38	22.03	22.50
8H	4H	20.62	21.35	21.08	21.79	22.26	20.46	21.19	20.93	21.64	22.11
	6H	21.37	21.97	21.87	22.47	22.95	21.06	21.66	21.55	22.15	22.63
	8H	21.70	22.24	22.22	22.75	23.24	21.28	21.82	21.79	22.33	22.82
	12H	21.98	22.46	22.49	22.95	23.52	21.46	21.94	21.97	22.43	23.00
12H	4H	20.63	21.28	21.11	21.76	22.23	20.50	21.15	20.98	21.63	22.10
	6H	21.42	21.96	21.94	22.47	22.96	21.12	21.66	21.64	22.18	22.66
	8H	21.82	22.29	22.33	22.79	23.35	21.41	21.89	21.92	22.38	22.95