

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: P1058517

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058517
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: S122RDR-H675D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

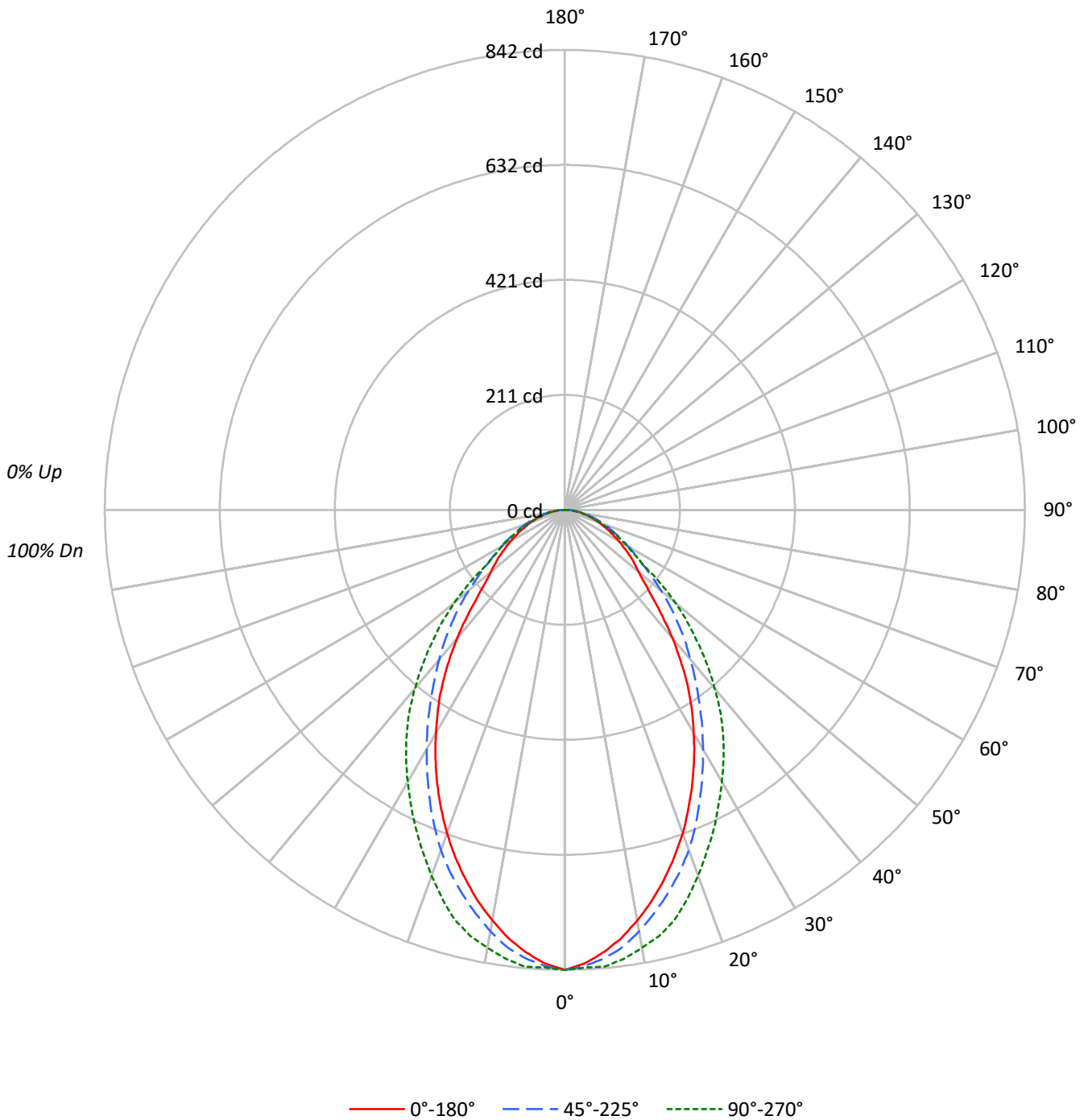
Lumens per Lamp: N/A
Luminaire Lumens: 1373.2 lumens
Efficiency: N/A
Efficacy: 58.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	
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	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	99	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°	15543	15543	15543
5°	15065	15267	15552
10°	14306	14679	15256
15°	13391	13894	14845
20°	12379	13019	13997
25°	11249	11913	13130
30°	10055	10769	12254
35°	8815	9650	11385
40°	7373	8619	10276
45°	5908	7633	8982
50°	5070	6577	7541
55°	4633	5595	5566
60°	4211	4945	4846
65°	3838	4427	4231
70°	3518	4057	3760
75°	3294	3743	3294
80°	3082	3464	2890
85°	3070	3642	2498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8982 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	5.7
10°-20°	205.9	15.0
20°-30°	271.5	19.8
30°-40°	273.4	19.9
40°-50°	222.5	16.2
50°-60°	151.7	11.0
60°-70°	98.5	7.2
70°-80°	54.2	3.9
80°-90°	17.7	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°	555.1	40.4
0°-40°	828.5	60.3
0°-60°	1202.8	87.6
0°-90°	1373.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1373.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	813	829	824	831	840	76
15°	701	719	727	757	777	196
25°	552	571	585	611	645	253
35°	391	411	428	466	505	243
45°	226	254	292	318	344	178
55°	144	158	174	175	173	129
65°	88	104	101	96	97	87
75°	46	57	52	47	46	49
85°	14	19	17	14	12	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	842.3	842.3	842.3	842.3	842.3
2.5°	831.4	845.0	836.0	836.9	838.7
5°	813.3	828.7	824.2	831.4	839.6
7.5°	790.7	806.1	807.9	818.8	828.7
10°	763.5	780.7	783.4	799.7	814.2
12.5°	733.6	752.6	756.3	779.8	798.8
15°	701.0	719.1	727.3	757.2	777.1
17.5°	666.6	683.8	696.5	723.7	746.3
20°	630.4	646.7	663.0	687.4	712.8
22.5°	591.4	609.5	624.9	649.4	678.4
25°	552.5	570.6	585.1	611.3	644.9
27.5°	512.6	530.7	545.2	573.3	609.5
30°	471.9	490.9	505.4	537.1	575.1
32.5°	432.0	451.0	467.3	500.9	540.7
35°	391.3	411.2	428.4	465.5	505.4
37.5°	347.8	370.4	392.2	429.3	468.2
40°	306.1	331.5	357.8	392.2	426.6
42.5°	264.5	292.5	325.1	354.1	385.8
45°	226.4	254.5	292.5	317.9	344.2
47.5°	196.5	220.1	260.8	281.7	305.2
50°	176.6	192.9	229.1	245.4	262.7
52.5°	160.3	173.9	199.3	210.1	219.2
55°	144.0	158.5	173.9	174.8	173.0
57.5°	127.7	144.0	152.2	145.8	149.4
60°	114.1	130.4	134.0	127.7	131.3
62.5°	99.6	117.7	117.7	111.4	113.2
65°	87.9	104.2	101.4	96.0	96.9
67.5°	76.1	92.4	87.9	82.4	82.4
70°	65.2	80.6	75.2	69.7	69.7
72.5°	55.2	67.9	64.3	58.0	57.1
75°	46.2	57.1	52.5	47.1	46.2
77.5°	37.1	46.2	42.6	38.0	36.2
80°	29.0	37.1	32.6	29.0	27.2
82.5°	21.7	28.1	24.5	20.8	19.0
85°	14.5	19.0	17.2	13.6	11.8
87.5°	7.2	12.7	10.9	9.1	7.2
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	16.25	17.69	16.62	18.00	18.32	16.50	17.94	16.86	18.25	18.56
	3H	17.78	19.07	18.16	19.39	19.76	17.85	19.14	18.23	19.47	19.83
	4H	18.34	19.55	18.74	19.90	20.28	18.34	19.54	18.74	19.89	20.27
	6H	18.77	19.88	19.18	20.24	20.64	18.68	19.80	19.10	20.16	20.56
	8H	18.92	19.97	19.35	20.36	20.77	18.79	19.85	19.22	20.24	20.64
	12H	19.03	20.04	19.46	20.42	20.85	18.86	19.87	19.29	20.26	20.69
4H	2H	16.82	18.03	17.22	18.38	18.76	17.02	18.23	17.42	18.57	18.96
	3H	18.63	19.62	19.04	20.03	20.43	18.60	19.59	19.01	20.00	20.40
	4H	19.37	20.27	19.80	20.68	21.12	19.19	20.09	19.62	20.50	20.94
	6H	19.96	20.73	20.41	21.18	21.64	19.66	20.44	20.12	20.88	21.34
	8H	20.17	20.89	20.63	21.34	21.81	19.81	20.54	20.27	20.98	21.45
	12H	20.33	20.98	20.81	21.46	21.93	19.92	20.57	20.40	21.05	21.52
8H	4H	19.63	20.36	20.10	20.81	21.28	19.48	20.21	19.95	20.65	21.12
	6H	20.39	20.99	20.89	21.48	21.96	20.07	20.67	20.57	21.17	21.64
	8H	20.71	21.25	21.23	21.77	22.26	20.29	20.83	20.81	21.34	21.83
	12H	21.00	21.47	21.51	21.97	22.53	20.48	20.95	20.99	21.45	22.01
12H	4H	19.65	20.30	20.13	20.78	21.25	19.51	20.16	20.00	20.64	21.12
	6H	20.43	20.98	20.95	21.49	21.98	20.14	20.68	20.66	21.19	21.68
	8H	20.83	21.31	21.34	21.80	22.37	20.42	20.90	20.94	21.39	21.96