

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: P1058274

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058274  
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-H1005D950-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: -

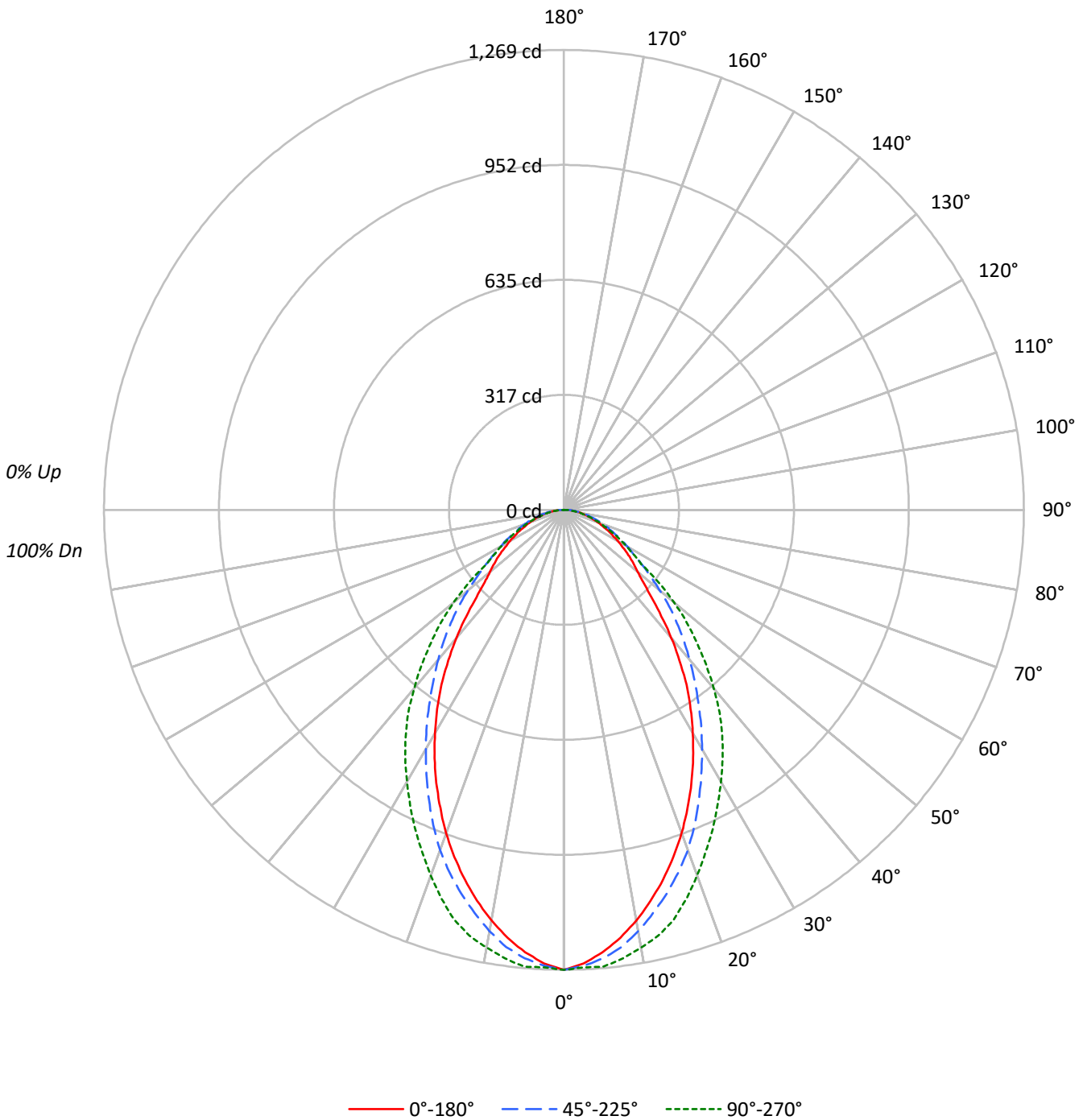
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2068.8 lumens  
Efficiency: N/A  
Efficacy: 56.7 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): 36.5  
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	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°	23416	23416	23416
5°	22696	23000	23430
10°	21551	22115	22985
15°	20175	20932	22364
20°	18649	19613	21086
25°	16946	17945	19780
30°	15147	16223	18460
35°	13279	14538	17152
40°	11109	12983	15481
45°	8901	11500	13531
50°	7639	9910	11359
55°	6981	8429	8384
60°	6344	7451	7300
65°	5781	6672	6375
70°	5298	6113	5670
75°	4962	5639	4962
80°	4644	5218	4346
85°	4615	5484	3747

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13531 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.1	5.7
10°-20°	310.1	15.0
20°-30°	409.1	19.8
30°-40°	411.9	19.9
40°-50°	335.2	16.2
50°-60°	228.6	11.0
60°-70°	148.4	7.2
70°-80°	81.7	3.9
80°-90°	26.6	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°	836.3	40.4
0°-40°	1248.2	60.3
0°-60°	1812.0	87.6
0°-90°	2068.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2068.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1225	1248	1242	1253	1265	115
15°	1056	1083	1096	1141	1171	296
25°	832	860	881	921	972	382
35°	590	620	645	701	761	366
45°	341	383	441	479	518	269
55°	217	239	262	263	261	194
65°	132	157	153	145	146	132
75°	70	86	79	71	70	74
85°	22	29	26	20	18	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1269.0	1269.0	1269.0	1269.0	1269.0
2.5°	1252.6	1273.0	1259.4	1260.8	1263.5
5°	1225.3	1248.5	1241.7	1252.6	1264.9
7.5°	1191.2	1214.4	1217.1	1233.5	1248.5
10°	1150.2	1176.2	1180.3	1204.8	1226.7
12.5°	1105.2	1133.9	1139.3	1174.8	1203.5
15°	1056.1	1083.4	1095.7	1140.7	1170.7
17.5°	1004.2	1030.2	1049.3	1090.2	1124.3
20°	949.7	974.2	998.8	1035.6	1073.8
22.5°	891.0	918.3	941.5	978.3	1022.0
25°	832.3	859.6	881.4	921.0	971.5
27.5°	772.3	799.6	821.4	863.7	918.3
30°	710.9	739.5	761.4	809.1	866.4
32.5°	650.9	679.5	704.1	754.6	814.6
35°	589.5	619.5	645.4	701.3	761.4
37.5°	524.0	558.1	590.8	646.8	705.4
40°	461.2	499.4	539.0	590.8	642.7
42.5°	398.4	440.7	489.8	533.5	581.3
45°	341.1	383.4	440.7	478.9	518.5
47.5°	296.1	331.6	393.0	424.3	459.8
50°	266.1	290.6	345.2	369.8	395.7
52.5°	241.5	262.0	300.2	316.6	330.2
55°	217.0	238.8	262.0	263.3	260.6
57.5°	192.4	217.0	229.2	219.7	225.1
60°	171.9	196.5	201.9	192.4	197.8
62.5°	150.1	177.4	177.4	167.8	170.6
65°	132.4	156.9	152.8	144.6	146.0
67.5°	114.6	139.2	132.4	124.2	124.2
70°	98.2	121.4	113.3	105.1	105.1
72.5°	83.2	102.3	96.9	87.3	86.0
75°	69.6	86.0	79.1	71.0	69.6
77.5°	55.9	69.6	64.1	57.3	54.6
80°	43.7	55.9	49.1	43.7	40.9
82.5°	32.7	42.3	36.8	31.4	28.7
85°	21.8	28.7	25.9	20.5	17.7
87.5°	10.9	19.1	16.4	13.6	10.9
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	17.68	19.11	18.04	19.43	19.74	17.92	19.36	18.29	19.67	19.99
	3H	19.20	20.49	19.58	20.82	21.18	19.28	20.57	19.66	20.90	21.26
	4H	19.77	20.97	20.17	21.32	21.70	19.76	20.97	20.16	21.32	21.70
	6H	20.19	21.30	20.60	21.67	22.06	20.11	21.22	20.52	21.59	21.98
	8H	20.34	21.40	20.77	21.79	22.19	20.22	21.28	20.65	21.67	22.07
	12H	20.45	21.47	20.89	21.85	22.28	20.29	21.30	20.72	21.68	22.11
4H	2H	18.25	19.45	18.65	19.80	20.18	18.45	19.65	18.85	20.00	20.38
	3H	20.05	21.05	20.46	21.45	21.85	20.02	21.02	20.43	21.42	21.82
	4H	20.79	21.69	21.23	22.11	22.55	20.62	21.51	21.05	21.93	22.37
	6H	21.38	22.16	21.84	22.60	23.07	21.08	21.86	21.54	22.31	22.77
	8H	21.59	22.32	22.05	22.76	23.23	21.23	21.96	21.70	22.41	22.88
	12H	21.75	22.40	22.24	22.88	23.36	21.34	21.99	21.83	22.47	22.94
8H	4H	21.06	21.79	21.52	22.23	22.70	20.91	21.63	21.37	22.08	22.55
	6H	21.81	22.41	22.31	22.91	23.39	21.50	22.10	21.99	22.59	23.07
	8H	22.14	22.68	22.65	23.19	23.68	21.72	22.26	22.23	22.77	23.26
	12H	22.42	22.90	22.93	23.39	23.96	21.90	22.38	22.41	22.87	23.44
12H	4H	21.07	21.72	21.56	22.20	22.67	20.94	21.59	21.42	22.07	22.54
	6H	21.86	22.40	22.38	22.91	23.40	21.56	22.10	22.08	22.62	23.11
	8H	22.26	22.73	22.77	23.23	23.79	21.85	22.33	22.36	22.82	23.39