

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: P1057869

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057869
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-S1005D950-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

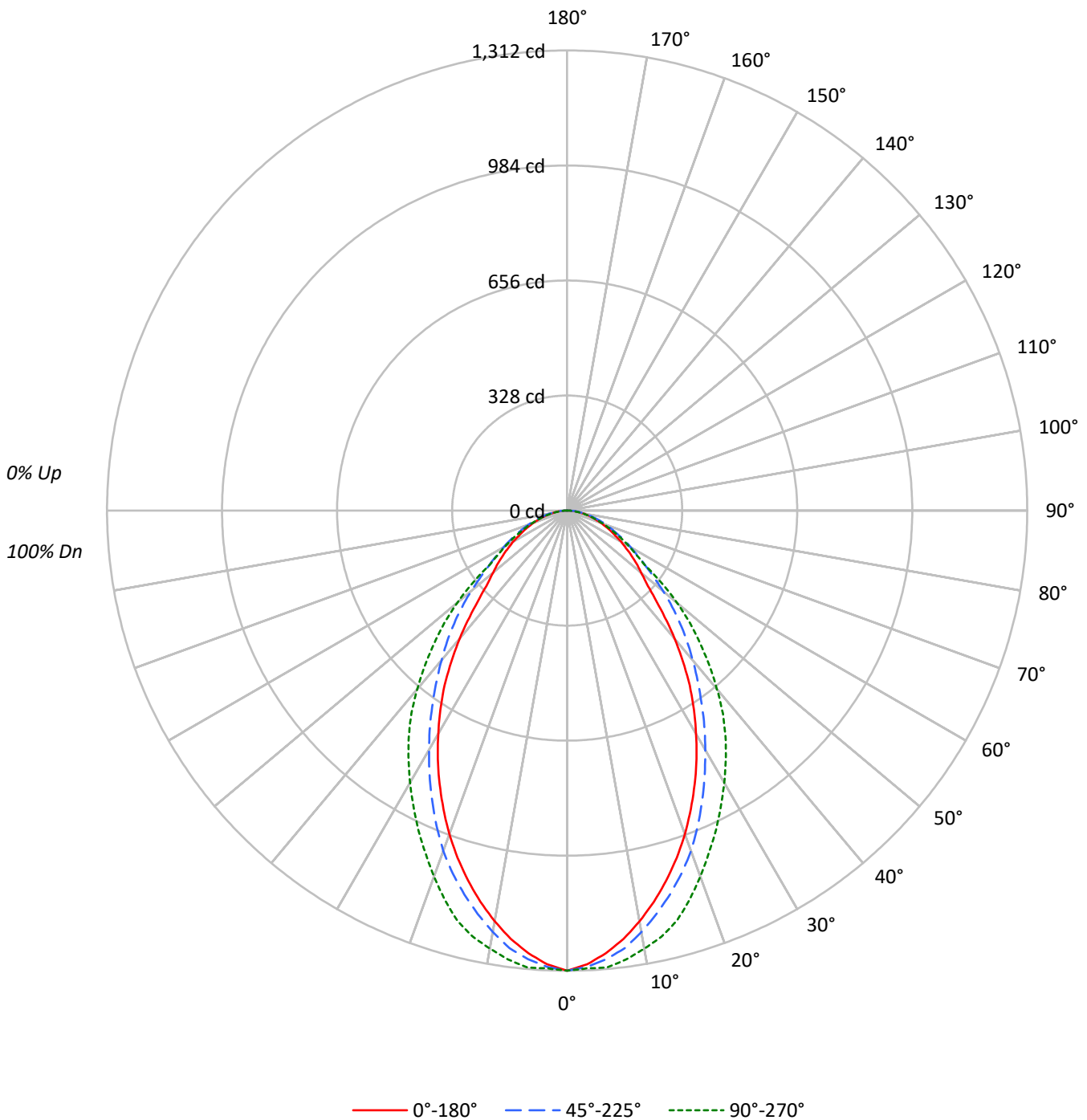
Lumens per Lamp: N/A
Luminaire Lumens: 2138.6 lumens
Efficiency: N/A
Efficacy: 51.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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					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°	24206	24206	24206
5°	23463	23776	24221
10°	22280	22861	23761
15°	20857	21638	23121
20°	19277	20275	21799
25°	17518	18552	20448
30°	15659	16771	19085
35°	13728	15030	17730
40°	11485	13422	16004
45°	9201	11889	13987
50°	7897	10246	11744
55°	7216	8712	8667
60°	6558	7706	7547
65°	5973	6899	6589
70°	5481	6318	5859
75°	5126	5832	5126
80°	4792	5398	4495
85°	4785	5674	3874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13987 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	5.7
10°-20°	320.6	15.0
20°-30°	422.9	19.8
30°-40°	425.8	19.9
40°-50°	346.6	16.2
50°-60°	236.3	11.0
60°-70°	153.4	7.2
70°-80°	84.4	3.9
80°-90°	27.5	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°	864.6	40.4
0°-40°	1290.4	60.3
0°-60°	1873.2	87.6
0°-90°	2138.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2138.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1267	1291	1284	1295	1308	119
15°	1092	1120	1133	1179	1210	306
25°	860	889	911	952	1004	395
35°	609	640	667	725	787	378
45°	353	396	456	495	536	278
55°	224	247	271	272	269	201
65°	137	162	158	150	151	136
75°	72	89	82	73	72	76
85°	23	30	27	21	18	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1311.8	1311.8	1311.8	1311.8	1311.8
2.5°	1294.9	1316.0	1301.9	1303.3	1306.2
5°	1266.7	1290.7	1283.6	1294.9	1307.6
7.5°	1231.4	1255.4	1258.2	1275.1	1290.7
10°	1189.1	1215.9	1220.1	1245.5	1268.1
12.5°	1142.5	1172.2	1177.8	1214.5	1244.1
15°	1091.8	1120.0	1132.7	1179.2	1210.3
17.5°	1038.2	1065.0	1084.7	1127.0	1162.3
20°	981.7	1007.1	1032.5	1070.6	1110.1
22.5°	921.1	949.3	973.3	1011.4	1056.5
25°	860.4	888.6	911.2	952.1	1004.3
27.5°	798.4	826.6	849.2	892.9	949.3
30°	734.9	764.5	787.1	836.5	895.7
32.5°	672.8	702.5	727.8	780.0	842.1
35°	609.4	640.4	667.2	725.0	787.1
37.5°	541.7	576.9	610.8	668.6	729.3
40°	476.8	516.3	557.2	610.8	664.4
42.5°	411.9	455.6	506.4	551.5	600.9
45°	352.6	396.4	455.6	495.1	536.0
47.5°	306.1	342.8	406.2	438.7	475.4
50°	275.1	300.4	356.9	382.3	409.1
52.5°	249.7	270.8	310.3	327.2	341.4
55°	224.3	246.8	270.8	272.2	269.4
57.5°	198.9	224.3	237.0	227.1	232.7
60°	177.7	203.1	208.8	198.9	204.5
62.5°	155.2	183.4	183.4	173.5	176.3
65°	136.8	162.2	158.0	149.5	150.9
67.5°	118.5	143.9	136.8	128.4	128.4
70°	101.6	125.5	117.1	108.6	108.6
72.5°	86.0	105.8	100.1	90.3	88.9
75°	71.9	88.9	81.8	73.3	71.9
77.5°	57.8	71.9	66.3	59.2	56.4
80°	45.1	57.8	50.8	45.1	42.3
82.5°	33.9	43.7	38.1	32.4	29.6
85°	22.6	29.6	26.8	21.2	18.3
87.5°	11.3	19.7	16.9	14.1	11.3
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	17.79	19.23	18.16	19.54	19.86	18.04	19.48	18.40	19.79	20.10
	3H	19.32	20.61	19.70	20.93	21.30	19.40	20.68	19.77	21.01	21.37
	4H	19.88	21.09	20.28	21.44	21.82	19.88	21.08	20.28	21.43	21.81
	6H	20.30	21.42	20.72	21.78	22.18	20.22	21.34	20.64	21.70	22.10
	8H	20.46	21.51	20.88	21.90	22.31	20.33	21.39	20.76	21.78	22.18
	12H	20.57	21.58	21.00	21.96	22.39	20.40	21.41	20.83	21.80	22.22
4H	2H	18.36	19.57	18.76	19.92	20.30	18.56	19.77	18.96	20.12	20.50
	3H	20.17	21.16	20.58	21.57	21.97	20.14	21.13	20.55	21.54	21.94
	4H	20.91	21.81	21.34	22.22	22.66	20.73	21.63	21.16	22.04	22.48
	6H	21.49	22.27	21.95	22.72	23.18	21.20	21.98	21.66	22.42	22.88
	8H	21.70	22.43	22.17	22.88	23.35	21.35	22.08	21.81	22.52	22.99
	12H	21.87	22.52	22.35	23.00	23.47	21.46	22.11	21.94	22.59	23.06
8H	4H	21.17	21.90	21.64	22.35	22.82	21.02	21.75	21.49	22.19	22.66
	6H	21.93	22.53	22.43	23.02	23.50	21.61	22.21	22.11	22.70	23.18
	8H	22.25	22.79	22.77	23.30	23.79	21.83	22.37	22.35	22.88	23.37
	12H	22.54	23.01	23.05	23.51	24.07	22.01	22.49	22.53	22.98	23.55
12H	4H	21.19	21.84	21.67	22.32	22.79	21.05	21.70	21.54	22.18	22.66
	6H	21.97	22.51	22.49	23.03	23.52	21.68	22.22	22.19	22.73	23.22
	8H	22.37	22.85	22.88	23.34	23.91	21.96	22.44	22.47	22.93	23.50