

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: P1061994

Luminaire Tested: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061994
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

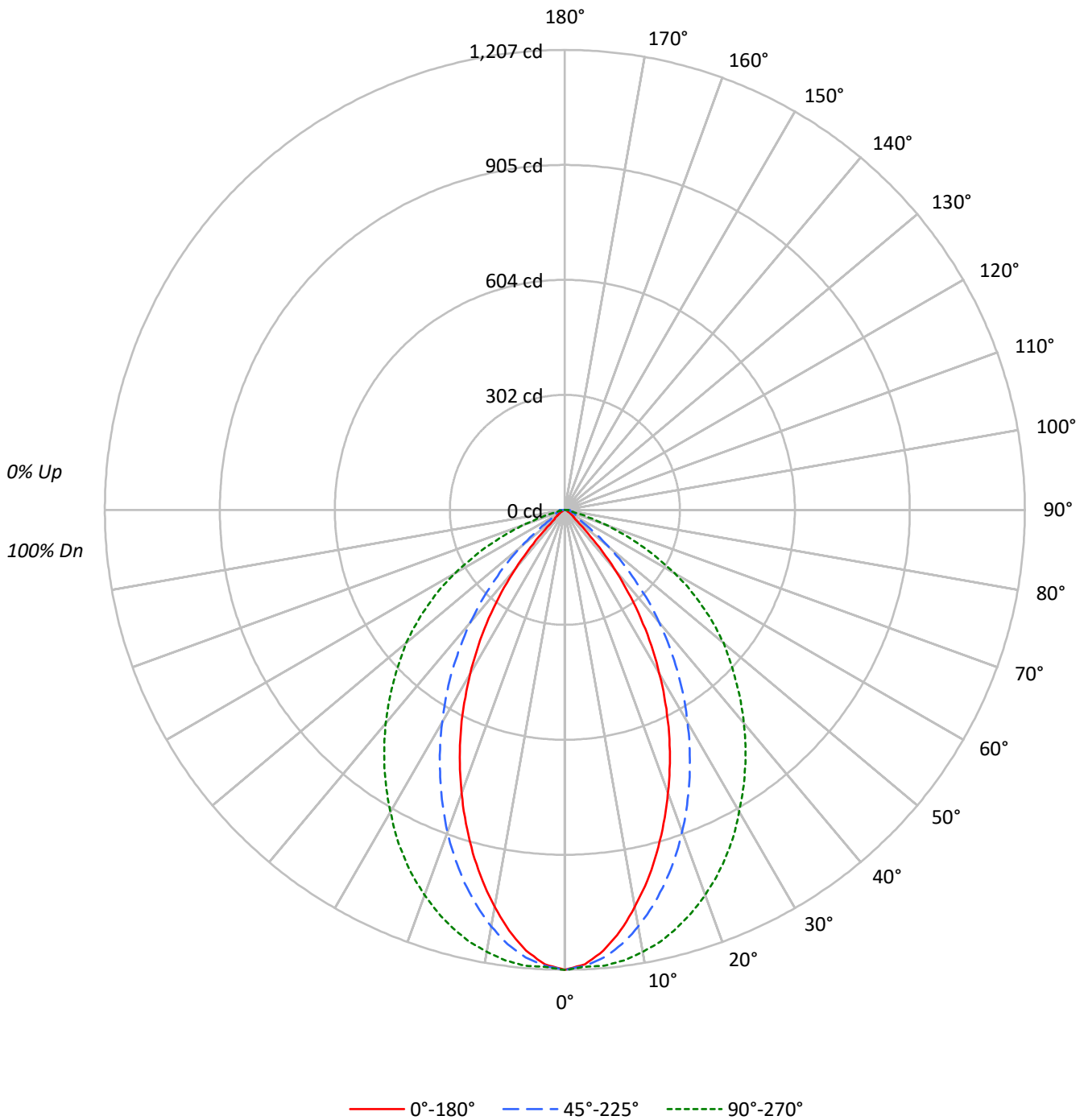
Lumens per Lamp: N/A
Luminaire Lumens: 1562.1 lumens
Efficiency: N/A
Efficacy: 42.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061994

CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061994

CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8313	8313	8313
5°	8029	8150	8298
10°	7400	7765	8235
15°	6646	7229	8099
20°	5799	6595	7883
25°	4912	5880	7613
30°	3946	5119	7274
35°	2920	4319	6934
40°	1808	3449	6571
45°	705	2521	6178
50°	331	1581	5820
55°	241	676	5282
60°	167	481	4581
65°	109	503	3563
70°	109	459	2241
75°	144	463	713
80°	214	531	480
85°	316	1059	743

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6178 cd/sqm



TEST NUMBER: P1061994

CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	7.1
10°-20°	286.9	18.4
20°-30°	365.4	23.4
30°-40°	340.1	21.8
40°-50°	234.1	15.0
50°-60°	132.5	8.5
60°-70°	62.6	4.0
70°-80°	19.6	1.3
80°-90°	10.2	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°	763.0	48.8
0°-40°	1103.1	70.6
0°-60°	1469.7	94.1
0°-90°	1562.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1162	1178	1179	1190	1201	108
15°	932	963	1014	1091	1136	260
25°	647	688	774	904	1002	295
35°	347	396	514	690	825	215
45°	72	115	259	468	634	68
55°	20	23	56	270	440	18
65°	7	8	31	97	219	7
75°	5	12	17	19	27	6
85°	4	11	13	12	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1061994

CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.3	1207.3	1207.3	1207.3	1207.3
2.5°	1193.9	1206.0	1197.9	1199.3	1200.6
5°	1161.7	1177.8	1179.2	1189.9	1200.6
7.5°	1114.8	1134.9	1149.6	1175.1	1192.6
10°	1058.4	1082.6	1110.7	1152.3	1177.8
12.5°	998.1	1026.2	1065.1	1124.2	1160.4
15°	932.3	963.2	1014.2	1090.6	1136.2
17.5°	862.6	897.5	959.2	1050.4	1108.1
20°	791.5	829.0	900.1	1004.8	1075.9
22.5°	720.4	759.3	838.4	955.1	1041.0
25°	646.6	688.2	774.0	904.2	1002.1
27.5°	571.5	614.4	709.6	851.8	960.5
30°	496.3	542.0	643.9	798.2	914.9
32.5°	422.6	468.2	579.5	744.5	870.6
35°	347.4	395.7	513.8	689.5	825.0
37.5°	272.3	324.6	449.4	633.2	778.1
40°	201.2	250.9	383.7	578.2	731.1
42.5°	134.1	182.4	324.6	523.2	682.8
45°	72.4	115.4	258.9	468.2	634.5
47.5°	38.9	61.7	202.6	414.5	587.6
50°	30.9	34.9	147.6	364.9	543.3
52.5°	25.5	28.2	96.6	317.9	492.3
55°	20.1	22.8	56.3	269.6	440.0
57.5°	16.1	18.8	36.2	224.0	389.0
60°	12.1	14.8	34.9	179.8	332.7
62.5°	9.4	10.7	32.2	138.2	273.7
65°	6.7	8.0	30.9	96.6	218.7
67.5°	5.4	6.7	28.2	61.7	163.7
70°	5.4	5.4	22.8	40.2	111.3
72.5°	5.4	9.4	20.1	26.8	67.1
75°	5.4	12.1	17.4	18.8	26.8
77.5°	5.4	13.4	14.8	14.8	14.8
80°	5.4	12.1	13.4	13.4	12.1
82.5°	5.4	10.7	12.1	13.4	10.7
85°	4.0	10.7	13.4	12.1	9.4
87.5°	4.0	10.7	12.1	10.7	6.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061994
 CATALOG NUMBER: S125RDR-H1270D950-X4F0-XX-UDD-BVL-W

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	0.00	0.00	0.00	0.00	0.23	16.60	17.89	16.97	18.21	18.52
	3H	0.00	0.00	0.00	0.26	0.62	17.32	18.46	17.70	18.79	19.16
	4H	0.00	0.75	0.09	1.10	1.49	17.35	18.41	17.75	18.76	19.14
	6H	0.96	1.93	1.37	2.30	2.70	17.30	18.27	17.71	18.64	19.04
	8H	1.60	2.52	2.03	2.91	3.32	17.27	18.20	17.70	18.59	18.99
	12H	2.18	3.07	2.62	3.45	3.88	17.26	18.14	17.69	18.52	18.95
4H	2H	1.12	2.18	1.52	2.53	2.92	16.39	17.46	16.80	17.81	18.19
	3H	1.93	2.80	2.35	3.21	3.61	17.15	18.02	17.56	18.42	18.83
	4H	2.94	3.72	3.38	4.14	4.58	17.18	17.95	17.61	18.37	18.82
	6H	4.22	4.89	4.69	5.34	5.81	17.16	17.82	17.62	18.27	18.74
	8H	4.81	5.43	5.28	5.88	6.35	17.14	17.76	17.61	18.21	18.68
	12H	5.36	5.91	5.85	6.40	6.87	17.15	17.70	17.64	18.18	18.66
8H	4H	4.36	4.98	4.83	5.43	5.90	17.06	17.69	17.53	18.13	18.60
	6H	5.92	6.43	6.42	6.92	7.40	17.05	17.56	17.55	18.06	18.54
	8H	6.71	7.17	7.23	7.68	8.17	17.06	17.52	17.59	18.04	18.53
	12H	7.54	7.95	8.06	8.44	9.01	17.12	17.53	17.64	18.02	18.59
12H	4H	4.58	5.13	5.06	5.61	6.08	17.02	17.57	17.51	18.05	18.53
	6H	6.29	6.74	6.81	7.26	7.75	17.01	17.46	17.53	17.98	18.47
	8H	7.28	7.68	7.79	8.17	8.75	17.05	17.46	17.57	17.95	18.52