

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: P1061943

Luminaire Tested: S125RDR-H1270D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D840-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

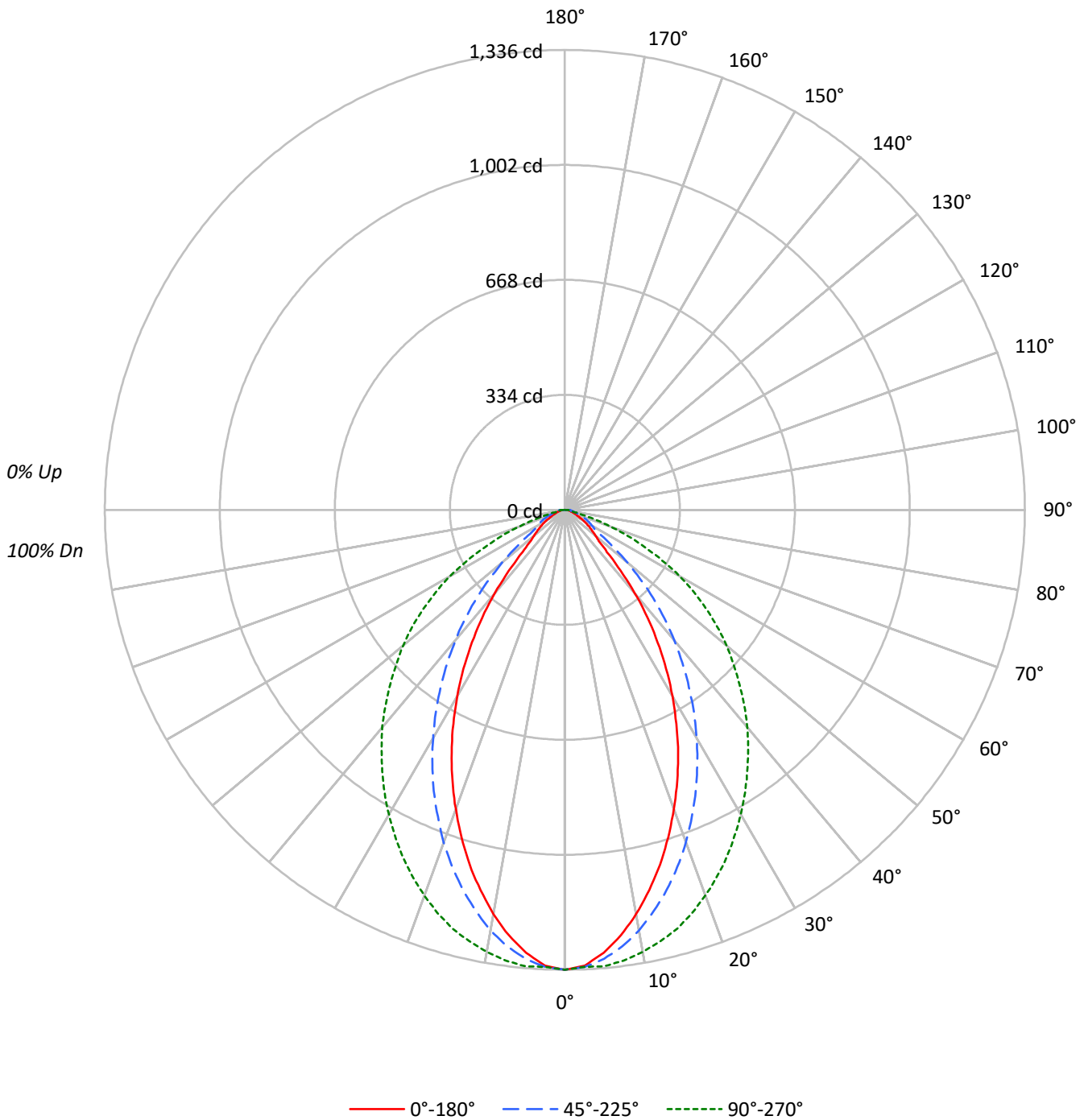
Lumens per Lamp: N/A
Luminaire Lumens: 1935.3 lumens
Efficiency: N/A
Efficacy: 53.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061943

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061943

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-SVL-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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9199	9199	9199
5°	8930	9048	9195
10°	8339	8676	9113
15°	7611	8147	8977
20°	6783	7532	8739
25°	5911	6839	8456
30°	4967	6084	8128
35°	3951	5287	7769
40°	2846	4441	7414
45°	1686	3526	6982
50°	1247	2510	6570
55°	1056	1551	6016
60°	861	1252	5299
65°	671	1157	4187
70°	572	1001	2800
75°	529	870	1133
80°	563	900	789
85°	671	1343	901

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6982 cd/sqm



TEST NUMBER: P1061943

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	6.4
10°-20°	323.4	16.7
20°-30°	422.7	21.8
30°-40°	411.8	21.3
40°-50°	308.9	16.0
50°-60°	193.6	10.0
60°-70°	100.8	5.2
70°-80°	36.5	1.9
80°-90°	14.5	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°	869.3	44.9
0°-40°	1281.0	66.2
0°-60°	1783.5	92.2
0°-90°	1935.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1935.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1292	1309	1309	1319	1330	120
15°	1068	1099	1143	1214	1259	298
25°	778	821	900	1022	1113	356
35°	470	520	629	796	924	292
45°	173	224	362	559	717	146
55°	88	92	129	338	501	78
65°	41	44	71	136	257	42
75°	20	27	33	34	43	22
85°	8	14	17	16	11	9
90°	0	0	0	0	0	



TEST NUMBER: P1061943

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1336.1	1336.1	1336.1	1336.1	1336.1
2.5°	1324.7	1337.5	1329.0	1329.0	1329.0
5°	1292.0	1309.1	1309.1	1319.0	1330.4
7.5°	1246.6	1266.5	1279.3	1303.4	1320.4
10°	1192.7	1216.8	1240.9	1280.7	1303.4
12.5°	1131.6	1160.0	1194.1	1249.4	1283.5
15°	1067.7	1098.9	1143.0	1214.0	1259.4
17.5°	998.1	1035.1	1087.6	1172.8	1228.2
20°	925.7	962.6	1028.0	1124.5	1192.7
22.5°	853.3	893.1	964.1	1073.4	1154.3
25°	778.1	820.7	900.2	1022.3	1113.1
27.5°	701.4	745.4	833.4	969.7	1067.7
30°	624.7	670.2	765.3	912.9	1022.3
32.5°	548.1	596.3	697.1	854.7	974.0
35°	470.0	519.7	629.0	796.5	924.3
37.5°	394.7	444.4	560.8	736.9	874.6
40°	316.6	370.6	494.1	677.3	824.9
42.5°	240.0	295.3	427.4	617.6	771.0
45°	173.2	224.3	362.1	559.4	717.0
47.5°	133.5	161.9	295.3	499.8	664.5
50°	116.4	124.9	234.3	444.4	613.4
52.5°	100.8	106.5	176.1	393.3	558.0
55°	88.0	92.3	129.2	337.9	501.2
57.5°	73.8	79.5	102.2	284.0	443.0
60°	62.5	65.3	90.9	234.3	384.8
62.5°	51.1	54.0	80.9	184.6	319.5
65°	41.2	44.0	71.0	136.3	257.0
67.5°	34.1	35.5	59.6	96.5	197.4
70°	28.4	29.8	49.7	66.7	139.1
72.5°	24.1	28.4	39.8	48.3	88.0
75°	19.9	27.0	32.7	34.1	42.6
77.5°	17.0	25.6	27.0	27.0	24.1
80°	14.2	21.3	22.7	21.3	19.9
82.5°	11.4	17.0	18.5	18.5	15.6
85°	8.5	14.2	17.0	15.6	11.4
87.5°	5.7	12.8	14.2	12.8	8.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061943
 CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-SVL-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	7.63	8.98	7.99	9.29	9.61	17.24	18.59	17.61	18.91	19.22
	3H	8.48	9.69	8.86	10.01	10.38	18.08	19.28	18.46	19.61	19.98
	4H	8.91	10.03	9.31	10.38	10.76	18.16	19.28	18.56	19.63	20.01
	6H	9.34	10.37	9.75	10.74	11.13	18.14	19.17	18.55	19.54	19.93
	8H	9.52	10.49	9.95	10.88	11.29	18.13	19.10	18.56	19.49	19.90
	12H	9.68	10.61	10.11	10.99	11.42	18.11	19.05	18.55	19.43	19.86
4H	2H	8.59	9.71	8.99	10.06	10.44	17.10	18.22	17.51	18.57	18.96
	3H	9.64	10.56	10.06	10.96	11.37	18.01	18.93	18.43	19.33	19.74
	4H	10.21	11.03	10.64	11.44	11.89	18.12	18.94	18.55	19.35	19.80
	6H	10.81	11.51	11.27	11.96	12.42	18.14	18.85	18.61	19.30	19.76
	8H	11.04	11.71	11.51	12.15	12.62	18.14	18.81	18.61	19.25	19.72
	12H	11.27	11.86	11.76	12.34	12.81	18.16	18.74	18.64	19.22	19.70
8H	4H	10.68	11.34	11.15	11.79	12.26	18.04	18.70	18.51	19.15	19.62
	6H	11.49	12.03	11.99	12.53	13.01	18.10	18.64	18.60	19.13	19.61
	8H	11.87	12.36	12.39	12.87	13.36	18.13	18.61	18.65	19.13	19.62
	12H	12.26	12.69	12.78	13.19	13.76	18.19	18.62	18.71	19.12	19.69
12H	4H	10.73	11.31	11.22	11.80	12.27	18.01	18.59	18.49	19.08	19.55
	6H	11.61	12.10	12.13	12.61	13.11	18.06	18.55	18.58	19.06	19.55
	8H	12.10	12.53	12.62	13.03	13.60	18.13	18.56	18.65	19.06	19.63