

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: P1061988

Luminaire Tested: S125RDR-H1270D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061988
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-H1270D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

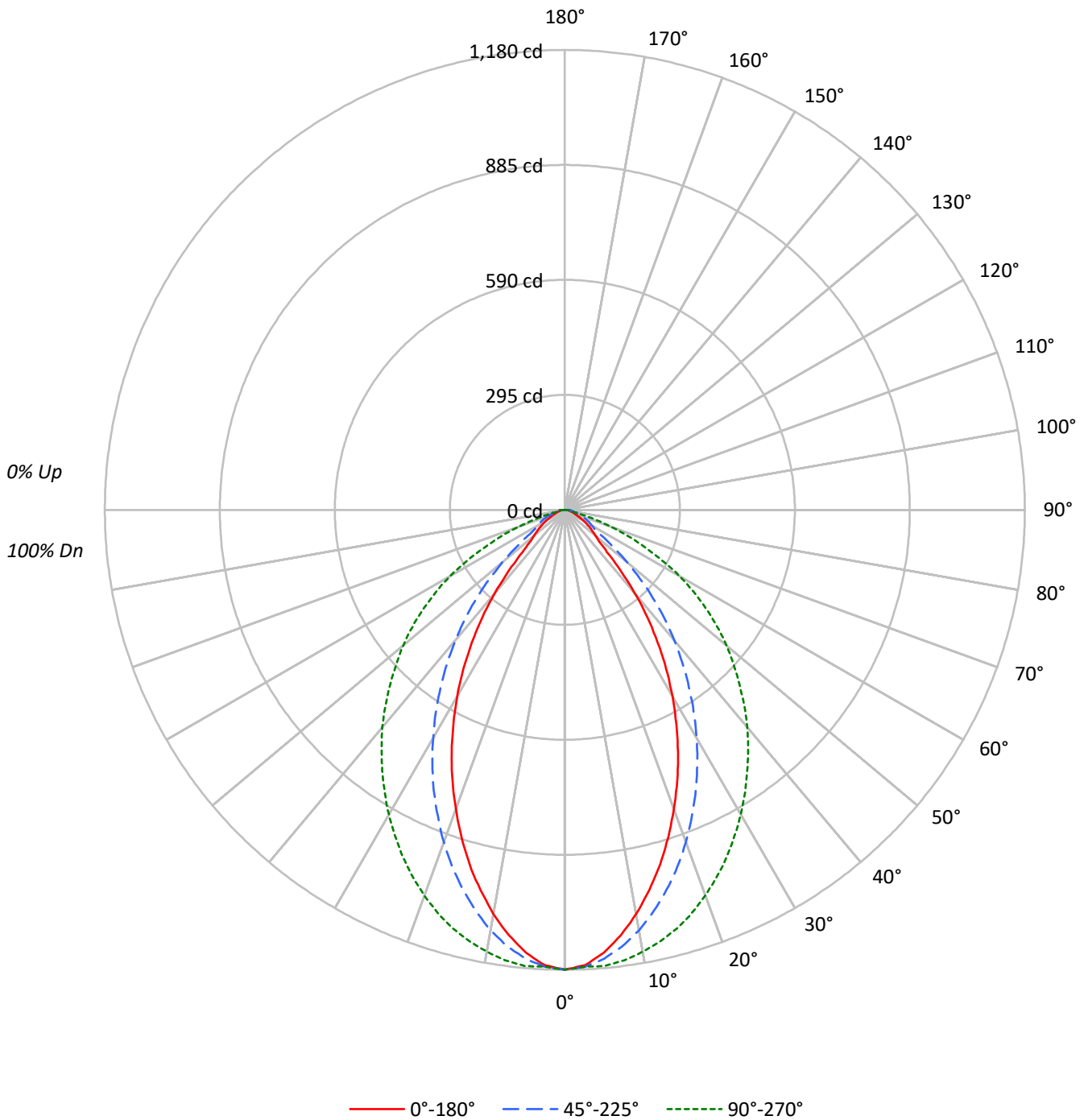
Lumens per Lamp: N/A
Luminaire Lumens: 1708.8 lumens
Efficiency: N/A
Efficacy: 46.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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				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°	8123	8123	8123
5°	7885	7989	8119
10°	7363	7661	8046
15°	6720	7194	7926
20°	5989	6651	7716
25°	5219	6038	7467
30°	4385	5372	7177
35°	3488	4668	6860
40°	2513	3921	6547
45°	1490	3113	6165
50°	1101	2216	5801
55°	933	1370	5313
60°	760	1104	4679
65°	593	1021	3697
70°	505	884	2474
75°	468	766	1000
80°	496	797	698
85°	592	1185	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.7	6.4
10°-20°	285.6	16.7
20°-30°	373.3	21.8
30°-40°	363.6	21.3
40°-50°	272.7	16.0
50°-60°	171.0	10.0
60°-70°	89.0	5.2
70°-80°	32.2	1.9
80°-90°	12.8	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°	767.6	44.9
0°-40°	1131.2	66.2
0°-60°	1574.9	92.2
0°-90°	1708.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1708.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1141	1156	1156	1165	1175	106
15°	943	970	1009	1072	1112	263
25°	687	725	795	903	983	314
35°	415	459	555	703	816	258
45°	153	198	320	494	633	129
55°	78	82	114	298	443	69
65°	36	39	63	120	227	37
75°	18	24	29	30	38	19
85°	8	12	15	14	10	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.7	1179.7	1179.7	1179.7	1179.7
2.5°	1169.7	1181.0	1173.5	1173.5	1173.5
5°	1140.9	1155.9	1155.9	1164.7	1174.7
7.5°	1100.8	1118.3	1129.6	1150.9	1165.9
10°	1053.1	1074.4	1095.7	1130.8	1150.9
12.5°	999.2	1024.3	1054.4	1103.3	1133.4
15°	942.8	970.4	1009.2	1071.9	1112.0
17.5°	881.4	914.0	960.3	1035.6	1084.5
20°	817.4	850.0	907.7	992.9	1053.1
22.5°	753.5	788.6	851.3	947.8	1019.3
25°	687.0	724.6	794.8	902.7	982.9
27.5°	619.3	658.2	735.9	856.3	942.8
30°	551.6	591.7	675.7	806.1	902.7
32.5°	483.9	526.6	615.6	754.7	860.0
35°	415.0	458.9	555.4	703.3	816.2
37.5°	348.5	392.4	495.2	650.7	772.3
40°	279.6	327.2	436.3	598.0	728.4
42.5°	211.9	260.8	377.4	545.4	680.8
45°	153.0	198.1	319.7	494.0	633.1
47.5°	117.8	142.9	260.8	441.3	586.7
50°	102.8	110.3	206.9	392.4	541.6
52.5°	89.0	94.0	155.5	347.3	492.7
55°	77.7	81.5	114.1	298.4	442.6
57.5°	65.2	70.2	90.3	250.7	391.2
60°	55.2	57.7	80.2	206.9	339.8
62.5°	45.1	47.6	71.5	163.0	282.1
65°	36.4	38.9	62.7	120.4	226.9
67.5°	30.1	31.3	52.7	85.3	174.3
70°	25.1	26.3	43.9	58.9	122.9
72.5°	21.3	25.1	35.1	42.6	77.7
75°	17.6	23.8	28.8	30.1	37.6
77.5°	15.0	22.6	23.8	23.8	21.3
80°	12.5	18.8	20.1	18.8	17.6
82.5°	10.0	15.0	16.3	16.3	13.8
85°	7.5	12.5	15.0	13.8	10.0
87.5°	5.0	11.3	12.5	11.3	7.5
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	7.20	8.55	7.56	8.86	9.18	16.81	18.16	17.17	18.47	18.79
	3H	8.05	9.25	8.43	9.58	9.95	17.65	18.85	18.03	19.18	19.54
	4H	8.48	9.60	8.88	9.95	10.33	17.72	18.84	18.13	19.19	19.58
	6H	8.90	9.93	9.32	10.30	10.70	17.71	18.74	18.12	19.10	19.50
	8H	9.08	10.06	9.51	10.45	10.85	17.69	18.67	18.12	19.06	19.46
	12H	9.24	10.17	9.67	10.56	10.99	17.68	18.61	18.11	19.00	19.43
4H	2H	8.16	9.28	8.56	9.63	10.01	16.67	17.79	17.07	18.14	18.52
	3H	9.21	10.13	9.62	10.53	10.93	17.58	18.50	17.99	18.90	19.30
	4H	9.77	10.59	10.21	11.01	11.45	17.68	18.50	18.12	18.92	19.36
	6H	10.37	11.08	10.83	11.53	11.99	17.71	18.42	18.17	18.86	19.33
	8H	10.61	11.27	11.08	11.72	12.19	17.71	18.37	18.18	18.82	19.29
	12H	10.83	11.42	11.32	11.90	12.37	17.72	18.31	18.21	18.79	19.27
8H	4H	10.24	10.91	10.71	11.35	11.82	17.61	18.27	18.08	18.72	19.19
	6H	11.06	11.60	11.56	12.09	12.57	17.66	18.20	18.16	18.70	19.18
	8H	11.43	11.92	11.96	12.44	12.93	17.70	18.18	18.22	18.70	19.19
	12H	11.82	12.25	12.34	12.75	13.32	17.76	18.19	18.27	18.68	19.25
12H	4H	10.30	10.88	10.78	11.36	11.84	17.58	18.16	18.06	18.64	19.12
	6H	11.18	11.67	11.70	12.18	12.67	17.63	18.12	18.15	18.63	19.12
	8H	11.67	12.10	12.18	12.59	13.16	17.70	18.13	18.22	18.62	19.20