

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: P1061939

Luminaire Tested: S125RDR-H1270D840-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061939
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D840-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

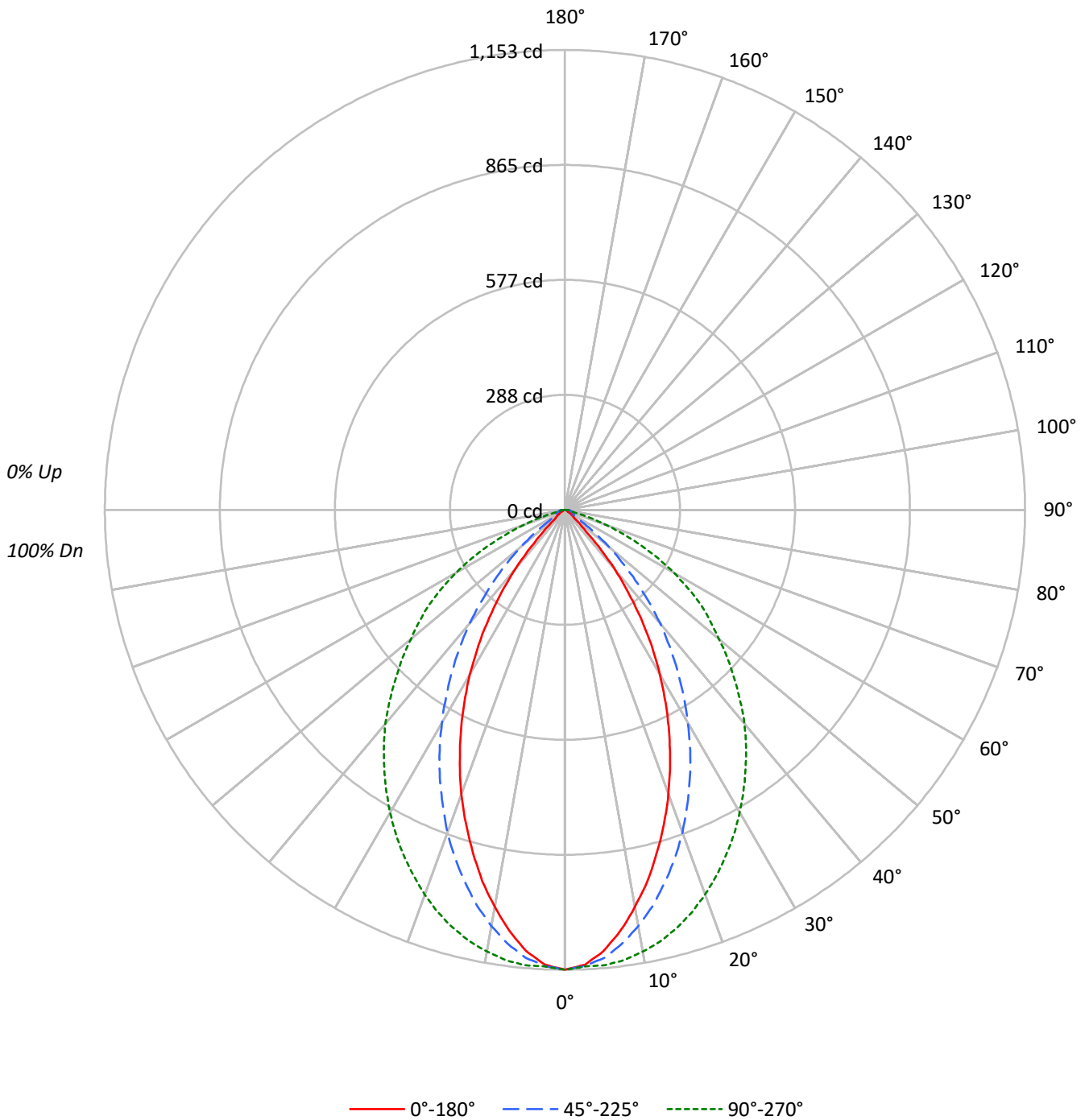
Lumens per Lamp: N/A
Luminaire Lumens: 1482.9 lumens
Efficiency: N/A
Efficacy: 40.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	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	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7938	7938	7938
5°	7674	7791	7919
10°	7068	7405	7862
15°	6345	6892	7732
20°	5555	6304	7521
25°	4692	5630	7259
30°	3781	4899	6965
35°	2780	4130	6635
40°	1736	3331	6292
45°	649	2433	5848
50°	304	1521	5399
55°	222	630	4994
60°	157	332	4321
65°	93	393	3423
70°	87	457	2172
75°	114	452	681
80°	170	563	508
85°	340	901	671

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5848 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	7.1
10°-20°	273.7	18.5
20°-30°	348.7	23.5
30°-40°	324.5	21.9
40°-50°	222.4	15.0
50°-60°	122.4	8.3
60°-70°	58.0	3.9
70°-80°	18.2	1.2
80°-90°	9.3	0.6
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°	728.1	49.1
0°-40°	1052.6	71.0
0°-60°	1397.3	94.2
0°-90°	1482.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1482.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1153	1153	1153	1153	1153	
5°	1110	1124	1127	1136	1146	103
15°	890	919	967	1039	1085	248
25°	618	656	741	860	956	282
35°	331	378	491	653	789	205
45°	67	112	250	443	601	64
55°	18	21	52	247	416	17
65°	6	7	24	91	210	7
75°	4	7	17	18	26	5
85°	4	10	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1152.9	1152.9	1152.9	1152.9	1152.9
2.5°	1141.5	1152.9	1144.4	1144.4	1145.8
5°	1110.3	1124.5	1127.3	1135.9	1145.8
7.5°	1064.9	1083.3	1097.5	1121.7	1138.7
10°	1010.9	1033.6	1059.2	1098.9	1124.5
12.5°	954.1	978.3	1016.6	1072.0	1107.5
15°	890.2	918.6	966.9	1039.3	1084.7
17.5°	824.9	856.2	915.8	1001.0	1057.8
20°	758.2	790.8	860.4	955.5	1026.5
22.5°	688.6	724.1	800.8	908.7	992.5
25°	617.6	656.0	741.1	860.4	955.5
27.5°	546.6	586.4	680.1	810.7	917.2
30°	475.6	516.8	616.2	759.6	876.0
32.5°	403.2	448.7	553.7	708.5	833.4
35°	330.8	377.7	491.3	653.1	789.4
37.5°	259.8	308.1	430.2	600.6	745.4
40°	193.1	241.4	370.6	548.1	700.0
42.5°	124.9	176.1	308.1	494.1	650.3
45°	66.7	112.2	249.9	443.0	600.6
47.5°	35.5	59.6	194.5	391.9	553.7
50°	28.4	32.7	142.0	340.8	504.0
52.5°	22.7	25.6	90.9	288.2	460.0
55°	18.5	21.3	52.5	247.0	416.0
57.5°	14.2	17.0	29.8	205.9	364.9
60°	11.4	12.8	24.1	164.7	313.8
62.5°	7.1	9.9	24.1	127.8	262.7
65°	5.7	7.1	24.1	90.9	210.1
67.5°	5.7	5.7	24.1	59.6	157.6
70°	4.3	4.3	22.7	38.3	107.9
72.5°	4.3	4.3	19.9	25.6	62.5
75°	4.3	7.1	17.0	18.5	25.6
77.5°	4.3	11.4	15.6	15.6	14.2
80°	4.3	11.4	14.2	12.8	12.8
82.5°	4.3	11.4	11.4	11.4	9.9
85°	4.3	9.9	11.4	9.9	8.5
87.5°	4.3	9.9	9.9	9.9	5.7
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	0.00	0.00	0.00	0.00	0.00	16.24	17.53	16.61	17.84	18.16
	3H	0.00	0.00	0.00	0.00	0.05	17.03	18.17	17.41	18.50	18.86
	4H	0.00	0.00	0.00	0.12	0.50	17.06	18.11	17.46	18.47	18.85
	6H	0.00	0.92	0.36	1.29	1.69	17.01	17.98	17.43	18.35	18.75
	8H	0.63	1.55	1.06	1.94	2.35	16.99	17.91	17.42	18.30	18.70
	12H	1.39	2.26	1.82	2.65	3.08	16.97	17.85	17.40	18.23	18.66
4H	2H	0.01	1.07	0.42	1.42	1.81	16.03	17.08	16.43	17.44	17.82
	3H	0.89	1.76	1.31	2.16	2.56	16.85	17.72	17.27	18.12	18.52
	4H	1.49	2.27	1.93	2.69	3.13	16.89	17.66	17.32	18.08	18.52
	6H	3.00	3.67	3.47	4.11	4.58	16.88	17.54	17.34	17.99	18.45
	8H	3.75	4.37	4.22	4.82	5.29	16.86	17.48	17.33	17.93	18.40
	12H	4.50	5.04	4.98	5.53	6.00	16.86	17.41	17.35	17.89	18.37
8H	4H	3.53	4.15	4.00	4.60	5.07	16.77	17.39	17.24	17.84	18.31
	6H	5.29	5.80	5.79	6.29	6.77	16.78	17.28	17.28	17.78	18.26
	8H	6.25	6.70	6.77	7.22	7.71	16.78	17.24	17.31	17.75	18.25
	12H	7.18	7.58	7.70	8.08	8.65	16.83	17.23	17.34	17.72	18.30
12H	4H	3.84	4.38	4.32	4.87	5.34	16.73	17.28	17.22	17.76	18.24
	6H	5.75	6.20	6.27	6.72	7.21	16.73	17.19	17.25	17.70	18.19
	8H	6.88	7.29	7.40	7.78	8.35	16.77	17.17	17.29	17.67	18.24