

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: P1061941

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
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-B
Description: DEFINE 5 BLACK 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

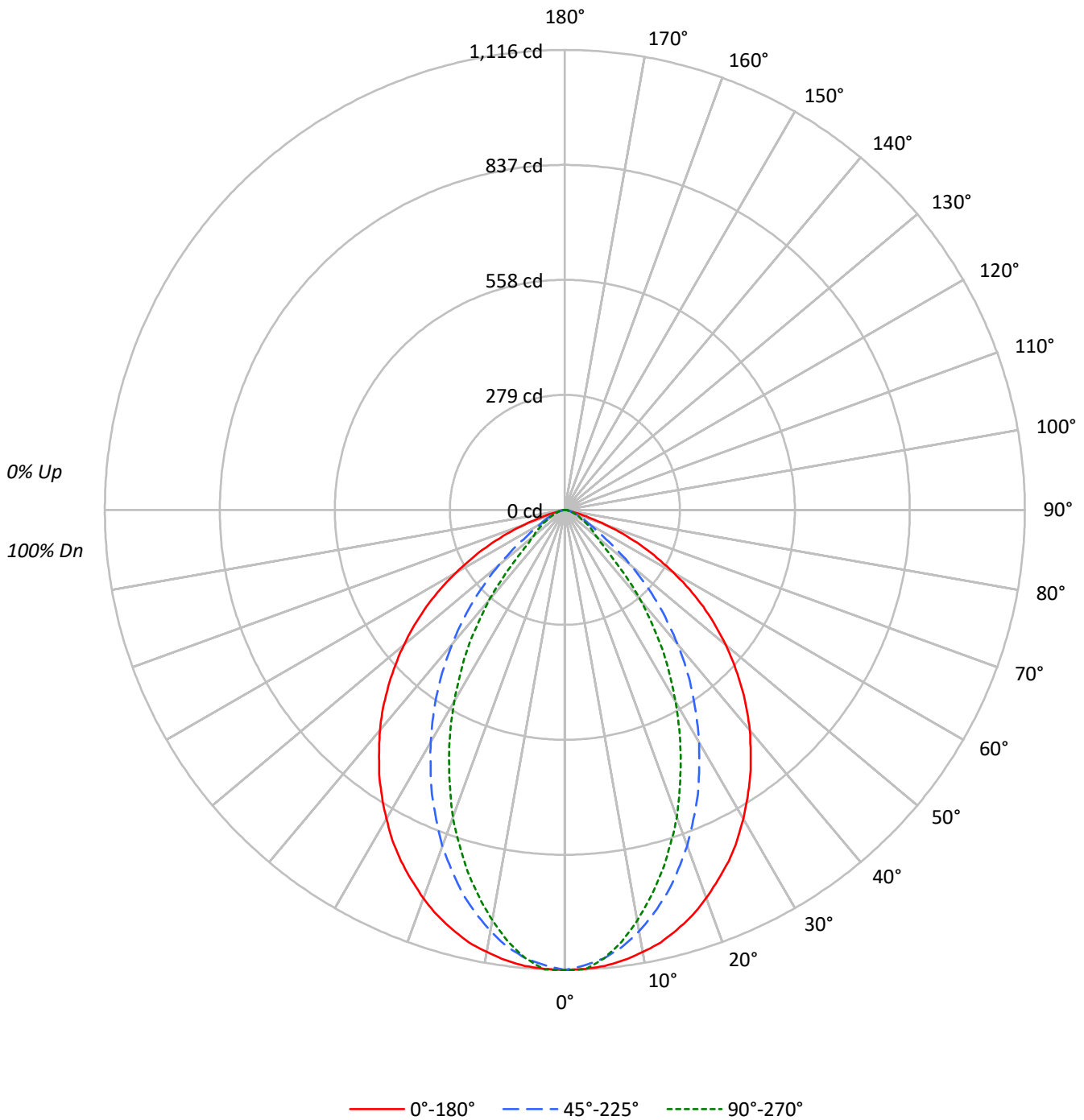
Lumens per Lamp: N/A
Luminaire Lumens: 1614.6 lumens
Efficiency: N/A
Efficacy: 44.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	95	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63			63	
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52			52	
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47			47	
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43			43	
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36			36	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7687	7687	7687
5°	7677	7549	7549
10°	7617	7260	7072
15°	7513	6856	6482
20°	7349	6361	5821
25°	7145	5798	5054
30°	6880	5176	4263
35°	6594	4531	3458
40°	6274	3825	2562
45°	5899	3066	1547
50°	5455	2249	1064
55°	4922	1379	886
60°	4181	938	704
65°	3306	717	554
70°	2086	513	457
75°	678	378	378
80°	226	282	337
85°	111	221	221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5899 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	6.4
10°-20°	272.7	16.9
20°-30°	358.7	22.2
30°-40°	352.4	21.8
40°-50°	266.6	16.5
50°-60°	161.7	10.0
60°-70°	76.3	4.7
70°-80°	19.9	1.2
80°-90°	3.0	0.2
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°	734.6	45.5
0°-40°	1087.1	67.3
0°-60°	1515.4	93.9
0°-90°	1614.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1614.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1111	1108	1092	1094	1092	105
15°	1054	1026	962	925	909	297
25°	940	870	763	692	665	432
35°	784	680	539	444	411	490
45°	606	477	315	200	159	466
55°	410	281	115	78	74	365
65°	203	104	44	37	34	200
75°	26	17	14	14	14	40
85°	1	1	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.5	1116.5	1116.5	1116.5	1116.5
2.5°	1115.0	1115.0	1106.5	1116.5	1116.5
5°	1110.8	1107.9	1092.3	1093.8	1092.3
7.5°	1102.3	1096.6	1069.6	1062.5	1056.9
10°	1089.5	1078.2	1038.4	1021.4	1011.5
12.5°	1075.3	1055.5	1001.5	977.4	961.8
15°	1054.0	1025.7	961.8	924.9	909.3
17.5°	1031.3	990.2	915.0	871.0	851.2
20°	1003.0	954.7	868.2	814.3	794.4
22.5°	971.8	915.0	814.3	754.7	727.8
25°	940.5	869.6	763.2	692.3	665.3
27.5°	905.1	824.2	705.1	631.3	601.5
30°	865.4	778.8	651.1	574.5	536.2
32.5°	825.6	732.0	594.4	510.7	472.4
35°	784.5	679.5	539.1	444.0	411.4
37.5°	740.5	629.9	482.3	383.0	344.7
40°	698.0	580.2	425.6	320.6	285.1
42.5°	652.6	530.6	368.8	259.6	219.9
45°	605.8	476.7	314.9	200.0	158.9
47.5°	557.5	428.4	261.0	147.5	119.2
50°	509.3	377.4	210.0	109.2	99.3
52.5°	459.6	327.7	158.9	90.8	86.5
55°	410.0	280.9	114.9	78.0	73.8
57.5°	358.9	229.8	86.5	66.7	62.4
60°	303.6	184.4	68.1	55.3	51.1
62.5°	252.5	144.7	55.3	45.4	42.6
65°	202.9	103.6	44.0	36.9	34.0
67.5°	151.8	69.5	34.0	28.4	28.4
70°	103.6	45.4	25.5	22.7	22.7
72.5°	62.4	27.0	18.4	18.4	18.4
75°	25.5	17.0	14.2	14.2	14.2
77.5°	8.5	9.9	9.9	11.3	11.3
80°	5.7	5.7	7.1	8.5	8.5
82.5°	2.8	4.3	4.3	5.7	5.7
85°	1.4	1.4	2.8	2.8	2.8
87.5°	0.0	0.0	0.0	1.4	1.4
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	16.41	17.75	16.78	18.06	18.37	7.07	8.40	7.44	8.72	9.03
	3H	17.12	18.30	17.50	18.63	18.99	7.85	9.03	8.23	9.36	9.73
	4H	17.14	18.23	17.54	18.58	18.97	8.10	9.20	8.51	9.55	9.93
	6H	17.07	18.07	17.48	18.44	18.84	8.28	9.29	8.69	9.66	10.05
	8H	17.03	17.98	17.46	18.37	18.77	8.32	9.28	8.75	9.67	10.07
	12H	16.99	17.90	17.42	18.28	18.71	8.33	9.24	8.76	9.62	10.05
4H	2H	16.25	17.34	16.65	17.69	18.08	7.56	8.66	7.96	9.01	9.39
	3H	16.99	17.88	17.41	18.29	18.69	8.47	9.36	8.88	9.76	10.17
	4H	17.01	17.80	17.45	18.22	18.67	8.78	9.57	9.21	9.99	10.44
	6H	16.95	17.63	17.41	18.08	18.55	9.04	9.72	9.50	10.17	10.63
	8H	16.90	17.54	17.37	17.98	18.45	9.10	9.74	9.57	10.19	10.66
	12H	16.85	17.42	17.34	17.90	18.37	9.13	9.69	9.62	10.17	10.65
8H	4H	16.89	17.53	17.36	17.98	18.45	8.89	9.53	9.36	9.98	10.45
	6H	16.82	17.34	17.32	17.83	18.32	9.21	9.73	9.71	10.22	10.71
	8H	16.76	17.23	17.29	17.75	18.24	9.31	9.78	9.84	10.30	10.79
	12H	16.72	17.13	17.24	17.63	18.20	9.38	9.79	9.89	10.28	10.85
12H	4H	16.85	17.41	17.34	17.89	18.37	8.86	9.43	9.35	9.91	10.38
	6H	16.76	17.23	17.28	17.74	18.23	9.18	9.65	9.70	10.16	10.65
	8H	16.73	17.14	17.24	17.63	18.20	9.32	9.73	9.83	10.23	10.80