

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: P1062236

Luminaire Tested: S125RDR-H850D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062236
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-H850D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

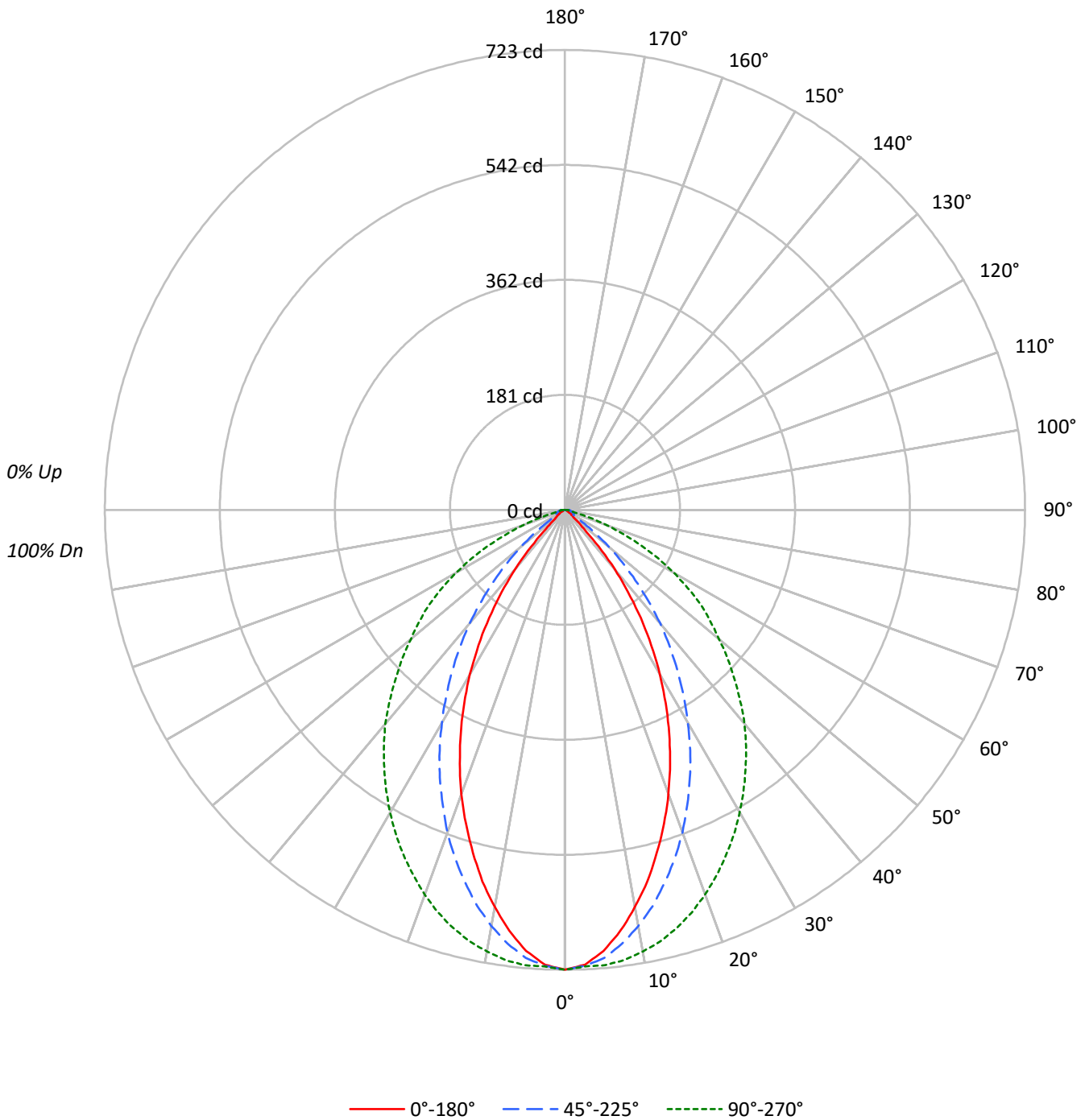
Lumens per Lamp: N/A
Luminaire Lumens: 929.8 lumens
Efficiency: N/A
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	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																												
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59																												
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54																												
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49																												
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45																												
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																												
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4977	4977	4977
5°	4812	4886	4966
10°	4432	4644	4930
15°	3979	4322	4849
20°	3483	3953	4716
25°	2942	3530	4552
30°	2372	3072	4367
35°	1743	2589	4161
40°	1088	2089	3945
45°	407	1526	3667
50°	191	953	3386
55°	139	395	3132
60°	98	208	2710
65°	59	246	2147
70°	54	286	1363
75°	72	285	426
80°	107	353	317
85°	213	561	419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3667 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	7.1
10°-20°	171.6	18.5
20°-30°	218.6	23.5
30°-40°	203.5	21.9
40°-50°	139.4	15.0
50°-60°	76.8	8.3
60°-70°	36.3	3.9
70°-80°	11.4	1.2
80°-90°	5.8	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°	456.5	49.1
0°-40°	660.0	71.0
0°-60°	876.2	94.2
0°-90°	929.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	929.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	696	705	707	712	718	64
15°	558	576	606	652	680	156
25°	387	411	465	540	599	177
35°	207	237	308	410	495	129
45°	42	70	157	278	377	40
55°	12	13	33	155	261	10
65°	4	4	15	57	132	4
75°	3	4	11	12	16	3
85°	3	6	7	6	5	3
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	722.9	722.9	722.9	722.9	722.9
2.5°	715.8	722.9	717.6	717.6	718.5
5°	696.2	705.1	706.9	712.2	718.5
7.5°	667.7	679.3	688.2	703.3	714.0
10°	633.9	648.1	664.2	689.1	705.1
12.5°	598.3	613.4	637.5	672.2	694.4
15°	558.2	576.0	606.3	651.7	680.2
17.5°	517.3	536.9	574.2	627.7	663.3
20°	475.4	495.9	539.5	599.2	643.7
22.5°	431.8	454.1	502.1	569.8	622.3
25°	387.3	411.3	464.7	539.5	599.2
27.5°	342.8	367.7	426.5	508.4	575.1
30°	298.3	324.1	386.4	476.3	549.3
32.5°	252.8	281.3	347.2	444.3	522.6
35°	207.4	236.8	308.0	409.5	495.0
37.5°	162.9	193.2	269.8	376.6	467.4
40°	121.1	151.4	232.4	343.7	438.9
42.5°	78.3	110.4	193.2	309.8	407.8
45°	41.8	70.3	156.7	277.8	376.6
47.5°	22.3	37.4	122.0	245.7	347.2
50°	17.8	20.5	89.0	213.7	316.1
52.5°	14.2	16.0	57.0	180.7	288.5
55°	11.6	13.4	32.9	154.9	260.9
57.5°	8.9	10.7	18.7	129.1	228.8
60°	7.1	8.0	15.1	103.3	196.8
62.5°	4.5	6.2	15.1	80.1	164.7
65°	3.6	4.5	15.1	57.0	131.8
67.5°	3.6	3.6	15.1	37.4	98.8
70°	2.7	2.7	14.2	24.0	67.7
72.5°	2.7	2.7	12.5	16.0	39.2
75°	2.7	4.5	10.7	11.6	16.0
77.5°	2.7	7.1	9.8	9.8	8.9
80°	2.7	7.1	8.9	8.0	8.0
82.5°	2.7	7.1	7.1	7.1	6.2
85°	2.7	6.2	7.1	6.2	5.3
87.5°	2.7	6.2	6.2	6.2	3.6
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	14.62	15.91	14.99	16.22	16.53
	3H	0.00	0.00	0.00	0.00	0.00	15.41	16.55	15.79	16.88	17.24
	4H	0.00	0.00	0.00	0.00	0.00	15.43	16.49	15.84	16.84	17.23
	6H	0.00	0.00	0.00	0.00	0.07	15.39	16.36	15.81	16.73	17.13
	8H	0.00	0.00	0.00	0.33	0.73	15.37	16.29	15.80	16.68	17.08
	12H	0.00	0.65	0.20	1.03	1.46	15.35	16.23	15.78	16.61	17.04
4H	2H	0.00	0.00	0.00	0.00	0.19	14.40	15.46	14.81	15.81	16.20
	3H	0.00	0.14	0.00	0.55	0.95	15.23	16.09	15.65	16.50	16.90
	4H	0.00	0.66	0.32	1.08	1.52	15.27	16.04	15.70	16.46	16.90
	6H	1.38	2.04	1.84	2.49	2.96	15.25	15.92	15.72	16.36	16.83
	8H	2.12	2.74	2.59	3.19	3.66	15.24	15.86	15.71	16.30	16.78
	12H	2.87	3.41	3.35	3.90	4.37	15.24	15.78	15.73	16.27	16.74
8H	4H	1.92	2.54	2.39	2.99	3.46	15.15	15.77	15.62	16.22	16.69
	6H	3.66	4.17	4.16	4.66	5.15	15.15	15.66	15.66	16.16	16.64
	8H	4.61	5.06	5.13	5.58	6.07	15.16	15.61	15.68	16.13	16.62
	12H	5.54	5.94	6.06	6.44	7.01	15.20	15.61	15.72	16.10	16.67
12H	4H	2.22	2.77	2.71	3.25	3.73	15.11	15.66	15.60	16.14	16.62
	6H	4.12	4.57	4.64	5.09	5.58	15.11	15.56	15.63	16.08	16.57
	8H	5.25	5.65	5.76	6.14	6.71	15.15	15.55	15.66	16.04	16.62