

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: P1061948

Luminaire Tested: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061948
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-H1270D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

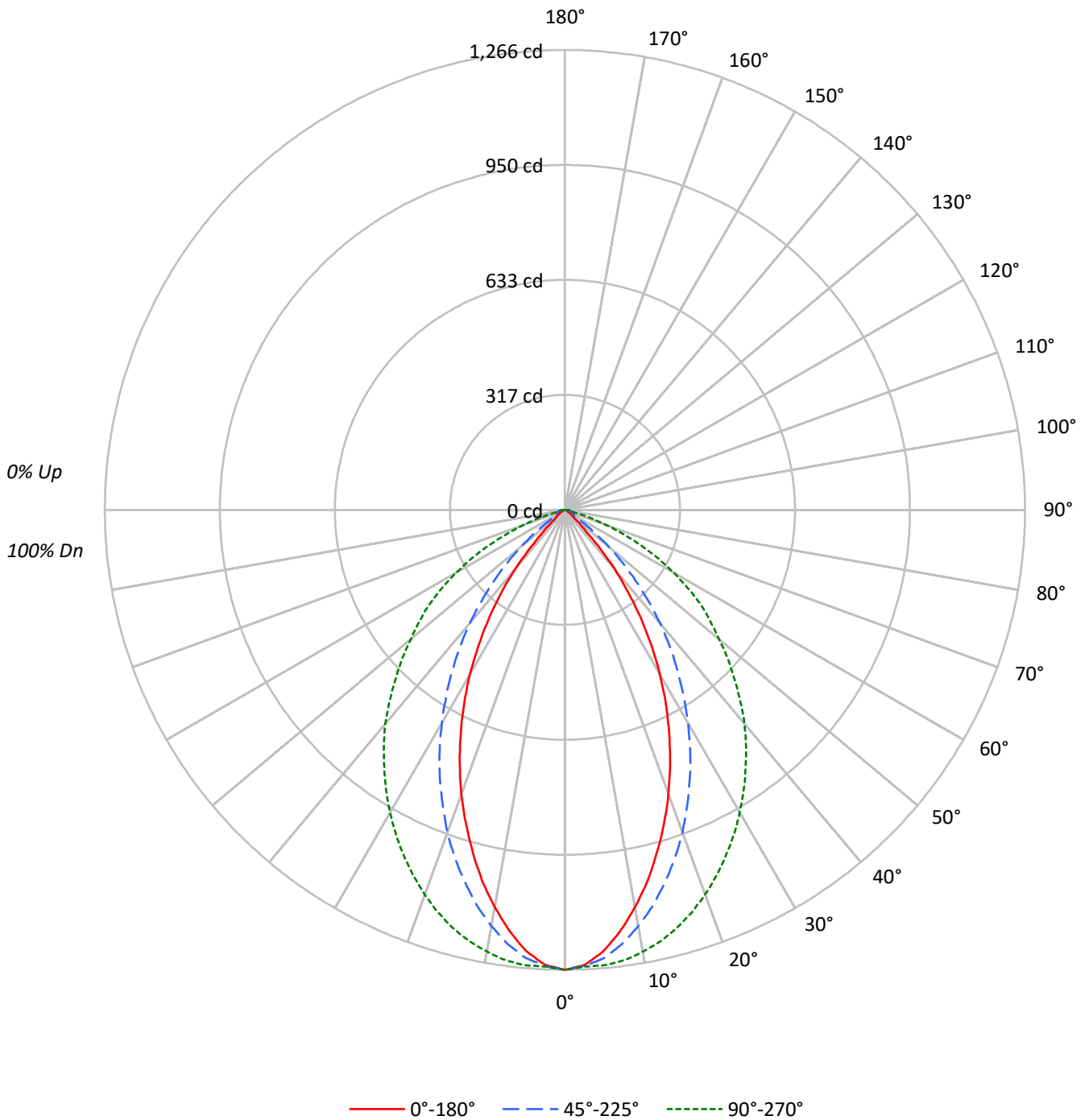
Lumens per Lamp: N/A
Luminaire Lumens: 1628.4 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061948

CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061948

CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

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				
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°	8717	8717	8717
5°	8427	8556	8697
10°	7762	8132	8634
15°	6968	7569	8491
20°	6101	6923	8260
25°	5153	6183	7972
30°	4152	5380	7648
35°	3054	4535	7287
40°	1906	3658	6909
45°	714	2672	6422
50°	334	1670	5929
55°	244	693	5483
60°	172	365	4745
65°	101	432	3760
70°	95	501	2386
75°	125	497	748
80°	186	619	555
85°	371	987	743

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6422 cd/sqm



TEST NUMBER: P1061948

CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	7.1
10°-20°	300.6	18.5
20°-30°	382.9	23.5
30°-40°	356.4	21.9
40°-50°	244.2	15.0
50°-60°	134.5	8.3
60°-70°	63.7	3.9
70°-80°	20.0	1.2
80°-90°	10.3	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°	799.5	49.1
0°-40°	1155.9	71.0
0°-60°	1534.5	94.2
0°-90°	1628.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1628.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1219	1235	1238	1247	1258	113
15°	978	1009	1062	1141	1191	273
25°	678	720	814	945	1049	310
35°	363	415	540	717	867	225
45°	73	123	274	486	660	70
55°	20	23	58	271	457	18
65°	6	8	26	100	231	7
75°	5	8	19	20	28	5
85°	5	11	12	11	9	4
90°	0	0	0	0	0	



TEST NUMBER: P1061948

CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.1	1266.1	1266.1	1266.1	1266.1
2.5°	1253.6	1266.1	1256.7	1256.7	1258.3
5°	1219.3	1234.9	1238.0	1247.4	1258.3
7.5°	1169.4	1189.7	1205.3	1231.8	1250.5
10°	1110.2	1135.1	1163.2	1206.8	1234.9
12.5°	1047.8	1074.3	1116.4	1177.2	1216.2
15°	977.6	1008.8	1061.8	1141.3	1191.2
17.5°	905.9	940.2	1005.7	1099.2	1161.6
20°	832.6	868.5	944.9	1049.3	1127.3
22.5°	756.2	795.2	879.4	997.9	1089.9
25°	678.3	720.4	813.9	944.9	1049.3
27.5°	600.3	644.0	746.9	890.3	1007.2
30°	522.3	567.5	676.7	834.2	962.0
32.5°	442.8	492.7	608.1	778.0	915.3
35°	363.3	414.7	539.5	717.2	866.9
37.5°	285.3	338.3	472.4	659.5	818.6
40°	212.1	265.1	407.0	601.9	768.7
42.5°	137.2	193.3	338.3	542.6	714.1
45°	73.3	123.2	274.4	486.5	659.5
47.5°	39.0	65.5	213.6	430.3	608.1
50°	31.2	35.9	155.9	374.2	553.5
52.5°	24.9	28.1	99.8	316.5	505.2
55°	20.3	23.4	57.7	271.3	456.8
57.5°	15.6	18.7	32.7	226.1	400.7
60°	12.5	14.0	26.5	180.9	344.6
62.5°	7.8	10.9	26.5	140.3	288.5
65°	6.2	7.8	26.5	99.8	230.8
67.5°	6.2	6.2	26.5	65.5	173.1
70°	4.7	4.7	24.9	42.1	118.5
72.5°	4.7	4.7	21.8	28.1	68.6
75°	4.7	7.8	18.7	20.3	28.1
77.5°	4.7	12.5	17.2	17.2	15.6
80°	4.7	12.5	15.6	14.0	14.0
82.5°	4.7	12.5	12.5	12.5	10.9
85°	4.7	10.9	12.5	10.9	9.4
87.5°	4.7	10.9	10.9	10.9	6.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061948
 CATALOG NUMBER: S125RDR-H1270D850-X4F0-XX-UDD-BVL-S

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	0.01	16.57	17.85	16.93	18.17	18.48
	3H	0.00	0.00	0.00	0.01	0.37	17.36	18.49	17.74	18.82	19.19
	4H	0.00	0.09	0.00	0.44	0.82	17.38	18.44	17.78	18.79	19.17
	6H	0.26	1.24	0.68	1.61	2.00	17.34	18.31	17.75	18.68	19.07
	8H	0.95	1.86	1.38	2.26	2.66	17.31	18.23	17.75	18.62	19.03
	12H	1.70	2.57	2.13	2.96	3.39	17.30	18.17	17.73	18.56	18.99
4H	2H	0.35	1.40	0.75	1.76	2.14	16.35	17.41	16.75	17.76	18.14
	3H	1.22	2.08	1.63	2.49	2.89	17.18	18.04	17.59	18.45	18.85
	4H	1.82	2.59	2.25	3.01	3.45	17.21	17.98	17.65	18.40	18.85
	6H	3.32	3.99	3.79	4.43	4.90	17.20	17.87	17.67	18.31	18.78
	8H	4.07	4.69	4.54	5.13	5.61	17.19	17.80	17.66	18.25	18.72
	12H	4.81	5.36	5.30	5.84	6.32	17.19	17.73	17.67	18.22	18.69
8H	4H	3.86	4.48	4.33	4.93	5.40	17.10	17.72	17.57	18.17	18.64
	6H	5.61	6.12	6.12	6.62	7.10	17.10	17.61	17.60	18.10	18.59
	8H	6.57	7.02	7.09	7.54	8.03	17.11	17.56	17.63	18.08	18.57
	12H	7.50	7.90	8.02	8.40	8.97	17.15	17.55	17.67	18.05	18.62
12H	4H	4.16	4.71	4.65	5.19	5.67	17.06	17.60	17.55	18.09	18.56
	6H	6.07	6.52	6.59	7.04	7.53	17.06	17.51	17.58	18.03	18.52
	8H	7.20	7.61	7.72	8.10	8.67	17.10	17.50	17.61	17.99	18.56