

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061818

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

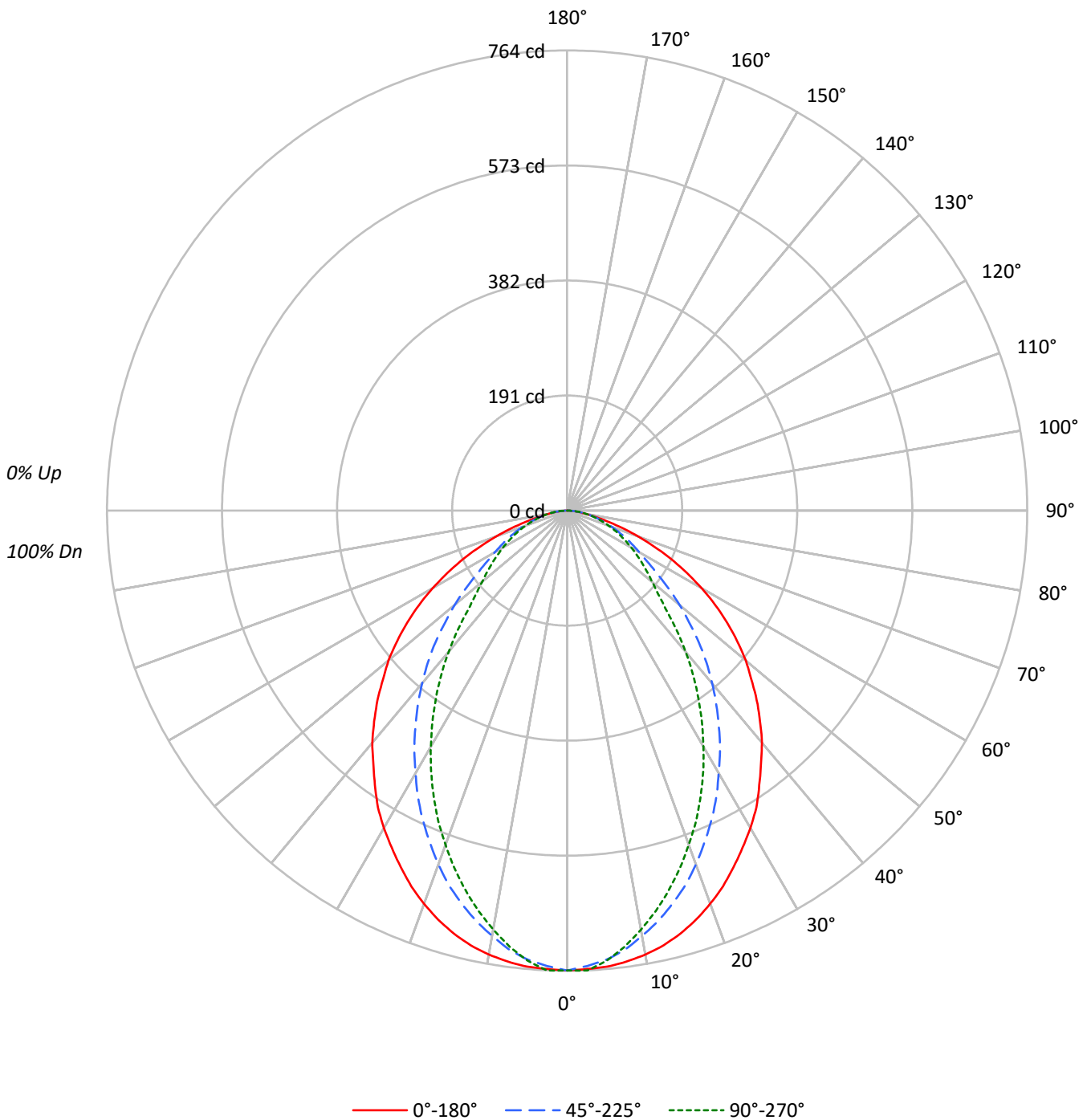
Lumens per Lamp: N/A
Luminaire Lumens: 1446.4 lumens
Efficiency: N/A
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P1061818

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061818

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5257	5257	5257
5°	5254	5174	5186
10°	5234	5014	4938
15°	5183	4816	4651
20°	5090	4580	4325
25°	4963	4308	3980
30°	4838	4001	3599
35°	4676	3693	3192
40°	4523	3368	2749
45°	4335	3011	2252
50°	4148	2610	1971
55°	3892	2180	1821
60°	3550	1906	1701
65°	3107	1742	1580
70°	2520	1568	1470
75°	1809	1434	1367
80°	1249	1281	1281
85°	916	1114	1177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4335 cd/sqm



TEST NUMBER: P1061818

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	4.9
10°-20°	192.0	13.3
20°-30°	265.4	18.3
30°-40°	282.7	19.5
40°-50°	248.3	17.2
50°-60°	188.3	13.0
60°-70°	122.3	8.5
70°-80°	60.6	4.2
80°-90°	15.9	1.1
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°	528.4	36.5
0°-40°	811.1	56.1
0°-60°	1247.7	86.3
0°-90°	1446.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1446.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	760	759	749	751	750	72
15°	727	710	676	660	652	205
25°	653	618	567	538	524	301
35°	556	505	439	400	380	348
45°	445	383	309	254	231	343
55°	324	260	182	157	152	289
65°	191	142	107	99	97	188
75°	68	60	54	52	51	76
85°	12	13	14	14	15	14
90°	0	0	0	0	0	



TEST NUMBER: P1061818

CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.5	763.5	763.5	763.5	763.5
2.5°	761.9	763.5	756.9	762.7	764.4
5°	760.2	758.6	748.6	751.1	750.3
7.5°	755.3	751.9	735.4	733.7	730.4
10°	748.6	740.3	717.1	711.3	706.3
12.5°	739.5	726.2	698.0	686.4	680.6
15°	727.1	710.5	675.7	659.9	652.5
17.5°	712.1	688.9	652.5	630.9	622.6
20°	694.7	667.4	625.1	600.2	590.3
22.5°	675.7	643.3	596.1	569.5	558.8
25°	653.3	617.6	567.1	538.0	523.9
27.5°	630.9	591.1	536.4	504.1	489.1
30°	608.5	562.9	503.2	468.4	452.7
32.5°	584.5	533.9	472.5	434.4	416.2
35°	556.3	504.9	439.4	399.6	379.7
37.5°	528.9	474.2	407.1	362.3	343.2
40°	503.2	445.2	374.7	325.8	305.9
42.5°	474.2	414.5	342.4	291.0	268.6
45°	445.2	383.0	309.2	253.7	231.3
47.5°	414.5	353.2	274.4	219.7	204.8
50°	387.2	322.5	243.7	194.0	184.0
52.5°	355.7	292.6	212.2	174.1	167.5
55°	324.2	260.3	181.6	156.7	151.7
57.5°	291.8	231.3	157.5	141.8	136.8
60°	257.8	201.5	138.4	126.0	123.5
62.5°	223.8	170.8	121.9	112.7	109.4
65°	190.7	141.8	106.9	98.7	97.0
67.5°	156.7	115.2	92.0	86.2	85.4
70°	125.2	93.7	77.9	74.6	73.0
72.5°	96.2	74.6	65.5	63.0	62.2
75°	68.0	59.7	53.9	52.2	51.4
77.5°	45.6	45.6	43.1	41.5	42.3
80°	31.5	33.2	32.3	32.3	32.3
82.5°	20.7	22.4	23.2	23.2	23.2
85°	11.6	13.3	14.1	14.1	14.9
87.5°	4.1	5.0	5.8	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061818
 CATALOG NUMBER: S125RDRP-S850D935-X4F0-XX-UDD-WVL-B

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	16.32	17.81	16.68	18.12	18.44	12.56	14.05	12.93	14.37	14.68
	3H	17.63	18.97	18.01	19.29	19.66	14.14	15.48	14.52	15.81	16.17
	4H	18.00	19.25	18.40	19.60	19.98	14.75	16.00	15.15	16.35	16.73
	6H	18.18	19.33	18.59	19.70	20.09	15.22	16.38	15.63	16.74	17.13
	8H	18.21	19.31	18.64	19.70	20.10	15.38	16.48	15.81	16.87	17.27
	12H	18.23	19.28	18.66	19.66	20.09	15.49	16.54	15.92	16.93	17.35
4H	2H	16.43	17.68	16.83	18.03	18.41	13.22	14.48	13.62	14.82	15.20
	3H	17.92	18.96	18.33	19.36	19.76	15.00	16.04	15.41	16.44	16.84
	4H	18.39	19.33	18.83	19.74	20.18	15.72	16.65	16.15	17.07	17.51
	6H	18.68	19.49	19.14	19.93	20.39	16.31	17.12	16.77	17.56	18.03
	8H	18.75	19.51	19.21	19.95	20.42	16.52	17.27	16.98	17.72	18.19
	12H	18.79	19.46	19.27	19.94	20.42	16.67	17.35	17.15	17.82	18.30
8H	4H	18.48	19.23	18.94	19.68	20.15	16.03	16.79	16.50	17.23	17.70
	6H	18.84	19.47	19.34	19.96	20.44	16.74	17.36	17.24	17.86	18.33
	8H	18.96	19.52	19.47	20.03	20.52	17.02	17.58	17.53	18.09	18.58
	12H	19.04	19.54	19.55	20.03	20.60	17.25	17.74	17.76	18.24	18.80
12H	4H	18.47	19.15	18.95	19.63	20.10	16.06	16.73	16.54	17.21	17.68
	6H	18.84	19.40	19.36	19.92	20.40	16.79	17.35	17.30	17.86	18.35
	8H	19.00	19.50	19.51	19.99	20.56	17.13	17.62	17.64	18.11	18.68