

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: P1061788

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061788
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-S850D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

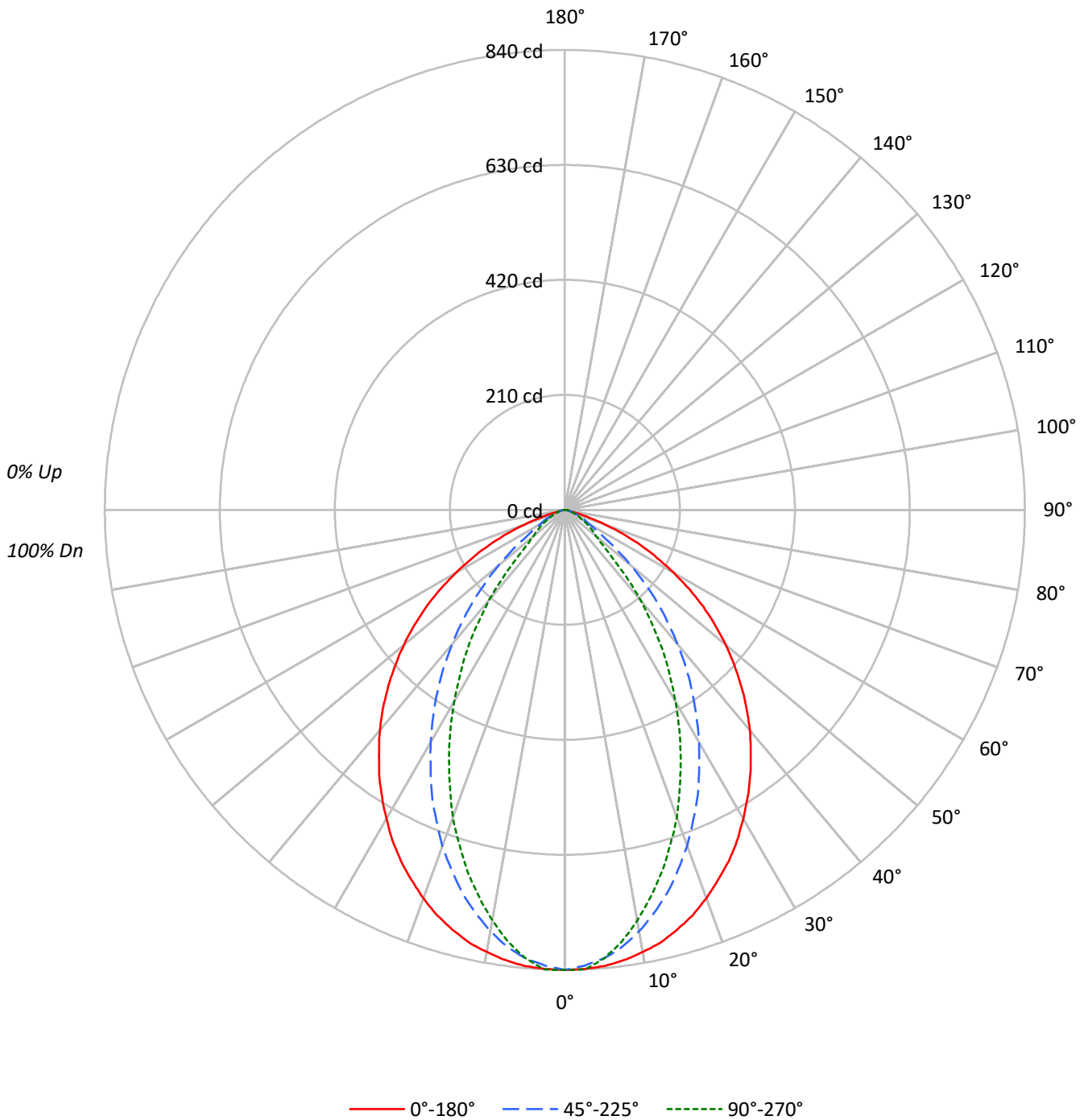
Lumens per Lamp: N/A
Luminaire Lumens: 1215.4 lumens
Efficiency: N/A
Efficacy: 47.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1061788

CATALOG NUMBER: S125RDR-S850D850-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061788

CATALOG NUMBER: S125RDR-S850D850-X4F0-XX-UDD-SVL-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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5786	5786	5786
5°	5779	5683	5683
10°	5734	5465	5323
15°	5655	5161	4879
20°	5532	4788	4382
25°	5379	4364	3805
30°	5179	3896	3210
35°	4963	3411	2603
40°	4722	2880	1929
45°	4440	2309	1165
50°	4107	1692	801
55°	3704	1038	666
60°	3147	706	529
65°	2488	539	417
70°	1570	387	344
75°	511	285	285
80°	170	210	254
85°	87	166	166

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4440 cd/sqm



TEST NUMBER: P1061788

CATALOG NUMBER: S125RDR-S850D850-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	6.4
10°-20°	205.3	16.9
20°-30°	270.0	22.2
30°-40°	265.3	21.8
40°-50°	200.7	16.5
50°-60°	121.7	10.0
60°-70°	57.5	4.7
70°-80°	15.0	1.2
80°-90°	2.3	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°	553.0	45.5
0°-40°	818.3	67.3
0°-60°	1140.7	93.9
0°-90°	1215.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	836	834	822	823	822	79
15°	793	772	724	696	684	223
25°	708	655	574	521	501	325
35°	590	512	406	334	310	369
45°	456	359	237	151	120	351
55°	309	211	86	59	56	275
65°	153	78	33	28	26	151
75°	19	13	11	11	11	30
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1061788

CATALOG NUMBER: S125RDR-S850D850-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	840.4	840.4	840.4	840.4	840.4
2.5°	839.3	839.3	832.9	840.4	840.4
5°	836.1	834.0	822.3	823.3	822.3
7.5°	829.7	825.5	805.2	799.8	795.6
10°	820.1	811.6	781.7	768.9	761.4
12.5°	809.4	794.5	753.9	735.8	724.0
15°	793.4	772.1	724.0	696.2	684.5
17.5°	776.3	745.4	688.8	655.7	640.7
20°	755.0	718.7	653.5	613.0	598.0
22.5°	731.5	688.8	613.0	568.1	547.8
25°	708.0	654.6	574.5	521.1	500.8
27.5°	681.3	620.4	530.7	475.2	452.8
30°	651.4	586.3	490.1	432.5	403.7
32.5°	621.5	551.0	447.4	384.4	355.6
35°	590.5	511.5	405.8	334.2	309.7
37.5°	557.4	474.1	363.1	288.3	259.5
40°	525.4	436.8	320.4	241.3	214.6
42.5°	491.2	399.4	277.6	195.4	165.5
45°	456.0	358.8	237.1	150.6	119.6
47.5°	419.7	322.5	196.5	111.1	89.7
50°	383.4	284.1	158.0	82.2	74.8
52.5°	346.0	246.7	119.6	68.3	65.1
55°	308.6	211.4	86.5	58.7	55.5
57.5°	270.2	173.0	65.1	50.2	47.0
60°	228.5	138.8	51.3	41.6	38.4
62.5°	190.1	108.9	41.6	34.2	32.0
65°	152.7	78.0	33.1	27.8	25.6
67.5°	114.3	52.3	25.6	21.4	21.4
70°	78.0	34.2	19.2	17.1	17.1
72.5°	47.0	20.3	13.9	13.9	13.9
75°	19.2	12.8	10.7	10.7	10.7
77.5°	6.4	7.5	7.5	8.5	8.5
80°	4.3	4.3	5.3	6.4	6.4
82.5°	2.1	3.2	3.2	4.3	4.3
85°	1.1	1.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)