

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: P1061446

Luminaire Tested: S125RDR-S1090D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061446
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-S1090D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

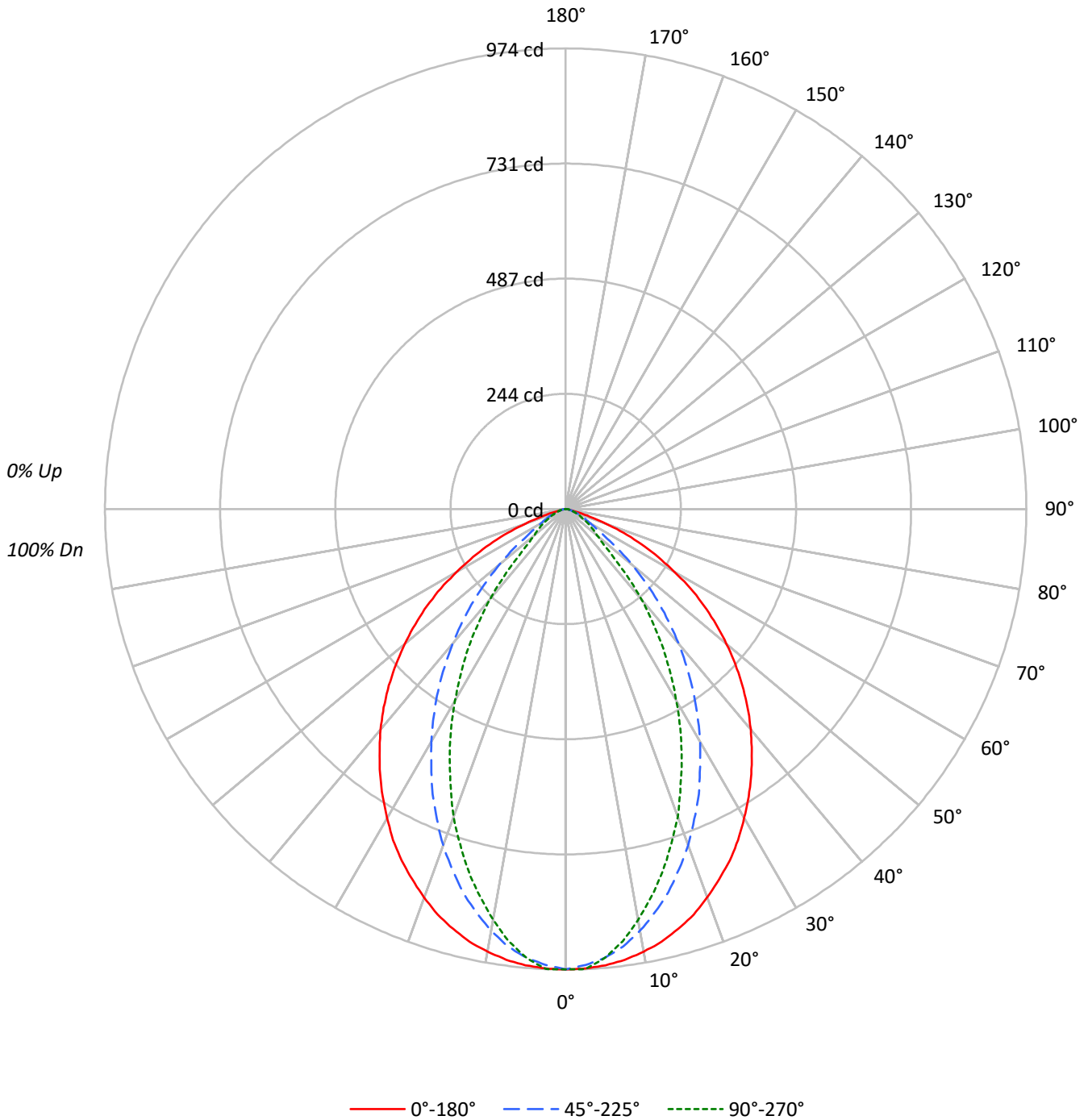
Lumens per Lamp: N/A
Luminaire Lumens: 1408.4 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1061446

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061446

CATALOG NUMBER: S125RDR-S1090D835-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	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°	6705	6705	6705
5°	6697	6585	6585
10°	6644	6333	6169
15°	6554	5980	5654
20°	6410	5549	5077
25°	6233	5057	4409
30°	6001	4516	3718
35°	5752	3952	3016
40°	5472	3336	2235
45°	5145	2675	1350
50°	4758	1961	928
55°	4293	1203	772
60°	3646	818	613
65°	2882	626	484
70°	1818	449	399
75°	593	330	330
80°	194	246	293
85°	95	197	197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5145 cd/sqm



TEST NUMBER: P1061446

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	6.4
10°-20°	237.9	16.9
20°-30°	312.9	22.2
30°-40°	307.4	21.8
40°-50°	232.6	16.5
50°-60°	141.0	10.0
60°-70°	66.6	4.7
70°-80°	17.4	1.2
80°-90°	2.6	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°	640.8	45.5
0°-40°	948.2	67.3
0°-60°	1321.8	93.9
0°-90°	1408.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1408.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	969	966	953	954	953	92
15°	919	895	839	807	793	259
25°	820	758	666	604	580	377
35°	684	593	470	387	359	427
45°	528	416	275	174	139	407
55°	358	245	100	68	64	318
65°	177	90	38	32	30	174
75°	22	15	12	12	12	34
85°	1	1	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1061446

CATALOG NUMBER: S125RDR-S1090D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.8	973.8	973.8	973.8	973.8
2.5°	972.6	972.6	965.2	973.8	973.8
5°	968.9	966.4	952.8	954.0	952.8
7.5°	961.5	956.5	933.0	926.8	921.9
10°	950.3	940.4	905.8	890.9	882.3
12.5°	937.9	920.6	873.6	852.6	839.0
15°	919.4	894.6	839.0	806.8	793.2
17.5°	899.6	863.7	798.1	759.8	742.4
20°	874.8	832.8	757.3	710.3	692.9
22.5°	847.6	798.1	710.3	658.3	634.8
25°	820.4	758.5	665.7	603.8	580.3
27.5°	789.5	718.9	615.0	550.6	524.7
30°	754.8	679.3	568.0	501.1	467.7
32.5°	720.2	638.5	518.5	445.5	412.1
35°	684.3	592.7	470.2	387.3	358.8
37.5°	645.9	549.4	420.7	334.1	300.7
40°	608.8	506.1	371.2	279.7	248.7
42.5°	569.2	462.8	321.7	226.4	191.8
45°	528.4	415.8	274.7	174.5	138.6
47.5°	486.3	373.7	227.7	128.7	103.9
50°	444.2	329.1	183.1	95.3	86.6
52.5°	400.9	285.8	138.6	79.2	75.5
55°	357.6	245.0	100.2	68.1	64.3
57.5°	313.1	200.5	75.5	58.2	54.4
60°	264.8	160.9	59.4	48.3	44.5
62.5°	220.3	126.2	48.3	39.6	37.1
65°	176.9	90.3	38.4	32.2	29.7
67.5°	132.4	60.6	29.7	24.7	24.7
70°	90.3	39.6	22.3	19.8	19.8
72.5°	54.4	23.5	16.1	16.1	16.1
75°	22.3	14.8	12.4	12.4	12.4
77.5°	7.4	8.7	8.7	9.9	9.9
80°	4.9	4.9	6.2	7.4	7.4
82.5°	2.5	3.7	3.7	4.9	4.9
85°	1.2	1.2	2.5	2.5	2.5
87.5°	0.0	0.0	0.0	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)