

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: P1061464

Luminaire Tested: S125RDR-S1090D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061464
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-S1090D850-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

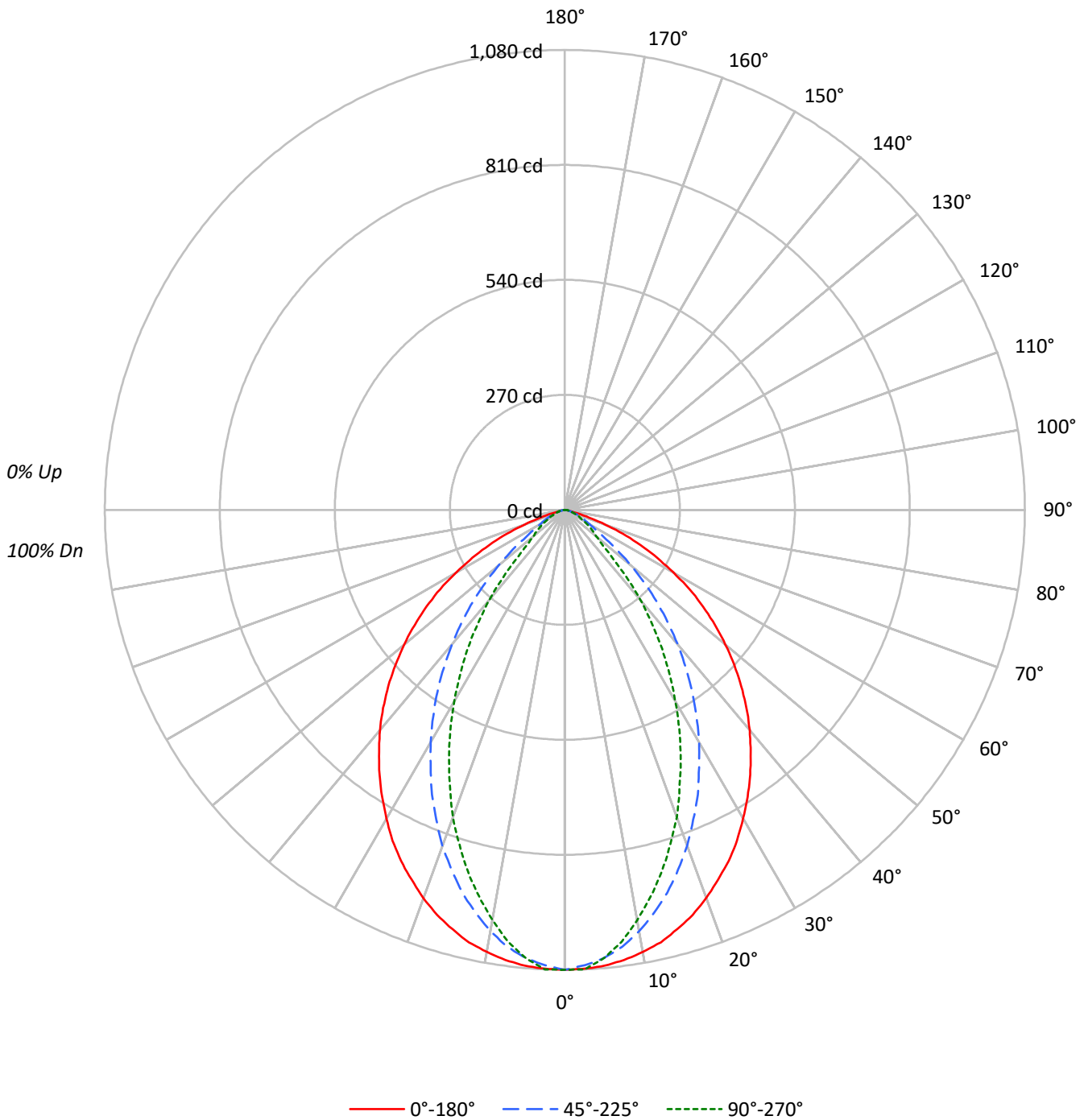
Lumens per Lamp: N/A
Luminaire Lumens: 1561.9 lumens
Efficiency: N/A
Efficacy: 44.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061464

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061464

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-SVL-B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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°	7436	7436	7436
5°	7426	7303	7303
10°	7368	7023	6840
15°	7268	6632	6270
20°	7109	6153	5631
25°	6912	5609	4889
30°	6655	5008	4124
35°	6379	4383	3345
40°	6069	3700	2479
45°	5706	2966	1497
50°	5277	2176	1029
55°	4761	1335	857
60°	4044	907	680
65°	3196	692	536
70°	2017	497	443
75°	657	364	364
80°	218	274	325
85°	111	213	213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5706 cd/sqm



TEST NUMBER: P1061464

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	6.4
10°-20°	263.8	16.9
20°-30°	347.0	22.2
30°-40°	340.9	21.8
40°-50°	257.9	16.5
50°-60°	156.4	10.0
60°-70°	73.8	4.7
70°-80°	19.3	1.2
80°-90°	2.9	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°	710.6	45.5
0°-40°	1051.6	67.3
0°-60°	1465.9	93.9
0°-90°	1561.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1561.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1074	1072	1057	1058	1057	102
15°	1020	992	930	895	880	287
25°	910	841	738	670	644	418
35°	759	657	522	430	398	474
45°	586	461	305	194	154	451
55°	397	272	111	76	71	353
65°	196	100	42	36	33	193
75°	25	16	14	14	14	38
85°	1	1	3	3	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1061464

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1080.0	1080.0	1080.0	1080.0	1080.0
2.5°	1078.6	1078.6	1070.4	1080.0	1080.0
5°	1074.5	1071.7	1056.6	1058.0	1056.6
7.5°	1066.3	1060.8	1034.7	1027.8	1022.3
10°	1053.9	1042.9	1004.5	988.0	978.4
12.5°	1040.2	1021.0	968.8	945.5	930.4
15°	1019.6	992.2	930.4	894.7	879.6
17.5°	997.6	957.8	885.1	842.6	823.4
20°	970.2	923.5	839.8	787.7	768.5
22.5°	940.0	885.1	787.7	730.0	704.0
25°	909.8	841.2	738.3	669.7	643.6
27.5°	875.5	797.3	682.0	610.7	581.8
30°	837.1	753.4	629.9	555.8	518.7
32.5°	798.7	708.1	575.0	494.0	457.0
35°	758.9	657.3	521.5	429.5	398.0
37.5°	716.3	609.3	466.6	370.5	333.5
40°	675.2	561.3	411.7	310.1	275.8
42.5°	631.2	513.2	356.8	251.1	212.7
45°	586.0	461.1	304.6	193.5	153.7
47.5°	539.3	414.4	252.5	142.7	115.3
50°	492.6	365.0	203.1	105.7	96.1
52.5°	444.6	317.0	153.7	87.8	83.7
55°	396.6	271.7	111.2	75.5	71.4
57.5°	347.2	222.3	83.7	64.5	60.4
60°	293.7	178.4	65.9	53.5	49.4
62.5°	244.3	140.0	53.5	43.9	41.2
65°	196.2	100.2	42.5	35.7	32.9
67.5°	146.8	67.2	32.9	27.4	27.4
70°	100.2	43.9	24.7	22.0	22.0
72.5°	60.4	26.1	17.8	17.8	17.8
75°	24.7	16.5	13.7	13.7	13.7
77.5°	8.2	9.6	9.6	11.0	11.0
80°	5.5	5.5	6.9	8.2	8.2
82.5°	2.7	4.1	4.1	5.5	5.5
85°	1.4	1.4	2.7	2.7	2.7
87.5°	0.0	0.0	0.0	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)