

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: P1061783

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D840-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

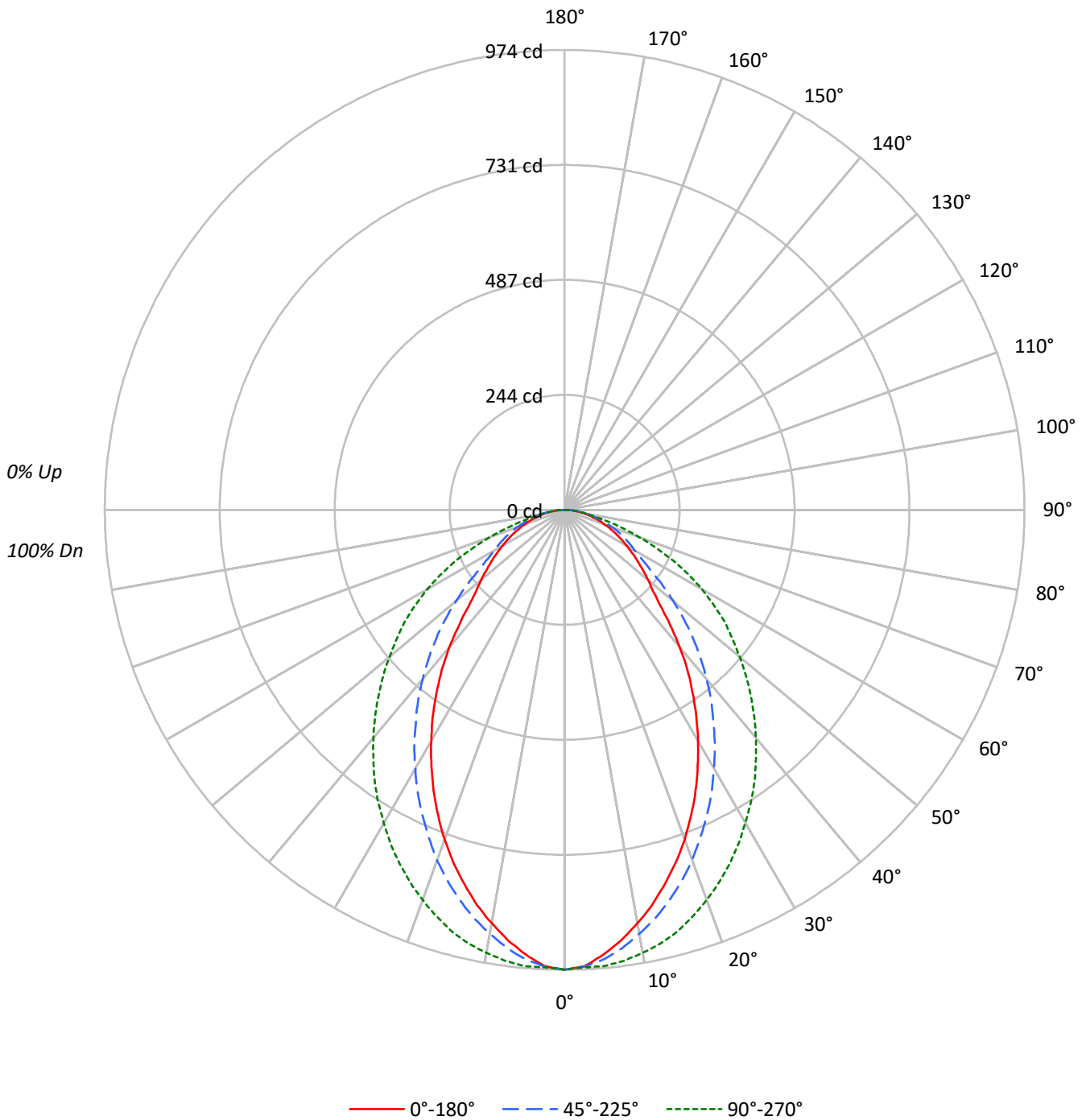
Lumens per Lamp: N/A
Luminaire Lumens: 1825.5 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6705	6705	6705
5°	6536	6603	6704
10°	6217	6373	6659
15°	5846	6102	6588
20°	5446	5788	6443
25°	4989	5417	6282
30°	4494	5027	6087
35°	3974	4620	5895
40°	3410	4206	5666
45°	2785	3742	5428
50°	2470	3209	5179
55°	2265	2662	4964
60°	2090	2358	4621
65°	1950	2266	4120
70°	1822	2154	3368
75°	1681	2019	2485
80°	1582	1891	1812
85°	1461	1841	1540

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	4.9
10°-20°	242.7	13.3
20°-30°	333.6	18.3
30°-40°	353.6	19.4
40°-50°	308.6	16.9
50°-60°	234.5	12.8
60°-70°	157.1	8.6
70°-80°	81.0	4.4
80°-90°	24.3	1.3
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°	666.5	36.5
0°-40°	1020.0	55.9
0°-60°	1563.2	85.6
0°-90°	1825.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1825.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	946	955	955	962	970	88
15°	820	836	856	894	924	230
25°	657	677	713	772	827	301
35°	473	500	550	628	701	295
45°	286	314	384	476	557	226
55°	189	195	222	326	414	169
65°	120	123	139	186	253	119
75°	63	67	76	81	93	68
85°	18	23	23	21	20	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.8	973.8	973.8	973.8	973.8
2.5°	967.0	973.8	968.0	968.0	969.9
5°	945.6	955.3	955.3	962.1	969.9
7.5°	919.3	930.0	935.9	951.4	963.1
10°	889.2	900.8	911.5	934.9	952.4
12.5°	857.1	869.7	886.3	916.4	940.7
15°	820.1	835.7	856.1	894.0	924.2
17.5°	783.1	798.7	824.0	868.7	902.8
20°	743.2	759.8	789.9	838.6	879.4
22.5°	700.4	718.9	751.0	806.5	854.2
25°	656.7	677.1	713.1	772.4	826.9
27.5°	610.9	635.3	674.2	737.4	797.7
30°	565.2	589.5	632.3	701.4	765.6
32.5°	519.5	545.8	592.5	665.4	734.5
35°	472.8	500.0	549.7	627.5	701.4
37.5°	427.1	454.3	509.8	590.5	665.4
40°	379.4	407.6	467.9	552.6	630.4
42.5°	330.8	360.9	426.1	513.7	594.4
45°	286.0	314.2	384.3	475.7	557.4
47.5°	252.9	271.4	342.4	436.8	521.4
50°	230.6	240.3	299.6	398.9	483.5
52.5°	208.2	216.0	259.7	360.0	447.5
55°	188.7	194.6	221.8	325.9	413.5
57.5°	169.3	175.1	192.6	291.9	373.6
60°	151.8	156.6	171.2	255.9	335.6
62.5°	135.2	139.1	154.7	221.8	294.8
65°	119.7	122.6	139.1	185.8	252.9
67.5°	104.1	107.0	123.6	151.8	208.2
70°	90.5	91.4	107.0	123.6	167.3
72.5°	76.9	77.8	90.5	100.2	128.4
75°	63.2	67.1	75.9	80.7	93.4
77.5°	51.6	56.4	61.3	63.2	63.2
80°	39.9	45.7	47.7	47.7	45.7
82.5°	29.2	34.0	35.0	33.1	31.1
85°	18.5	23.3	23.3	21.4	19.5
87.5°	8.8	12.6	12.6	11.7	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)