

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: P1061792

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061792
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-S850D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

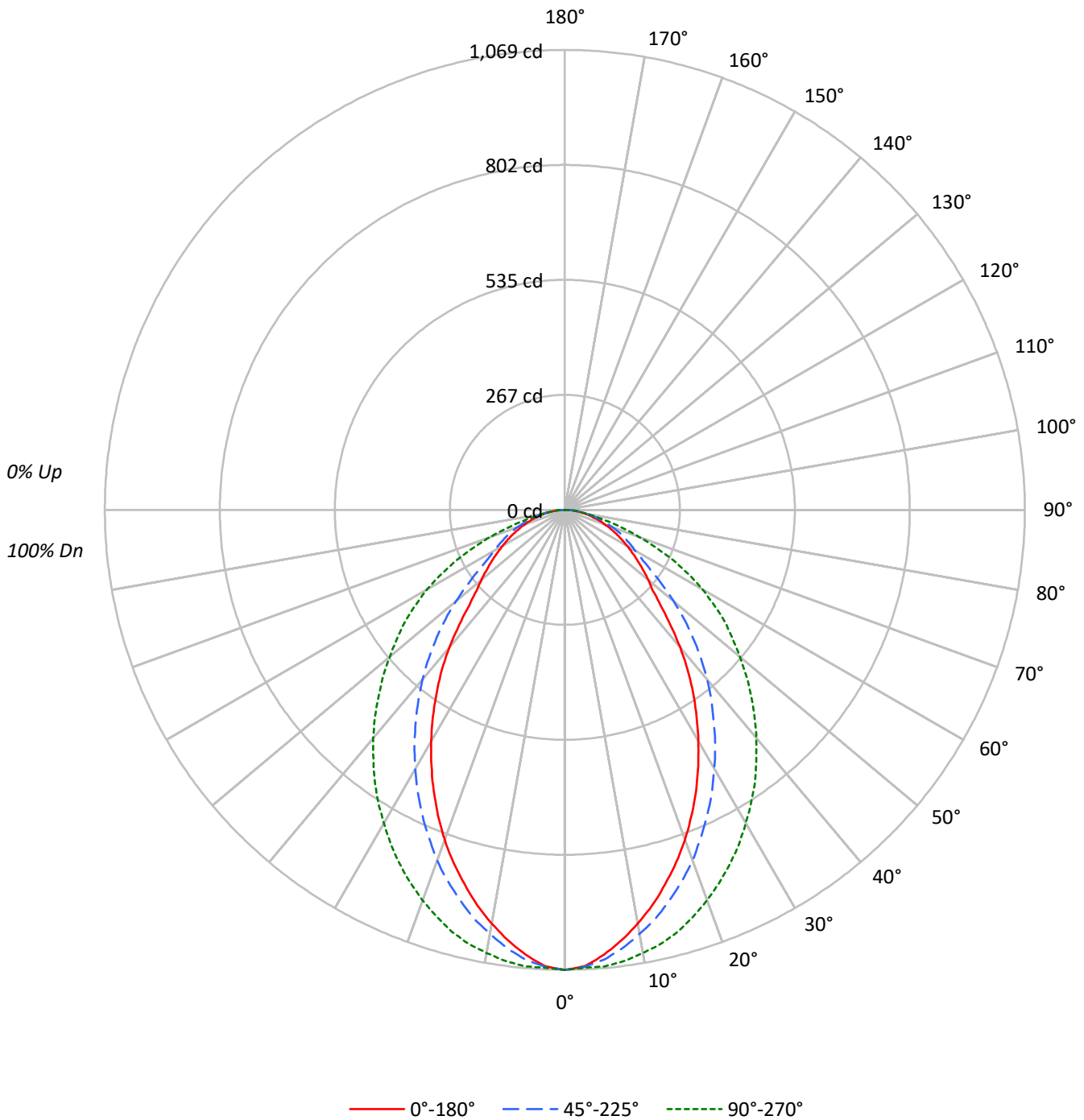
Lumens per Lamp: N/A
Luminaire Lumens: 2004.8 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	7363	7363	7363
5°	7177	7251	7361
10°	6827	6998	7312
15°	6420	6701	7234
20°	5980	6356	7077
25°	5478	5949	6899
30°	4935	5521	6685
35°	4364	5073	6475
40°	3745	4619	6222
45°	3058	4109	5961
50°	2712	3524	5688
55°	2488	2924	5450
60°	2296	2589	5076
65°	2141	2489	4526
70°	2001	2365	3700
75°	1846	2216	2729
80°	1737	2074	1990
85°	1604	2022	1691

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	4.9
10°-20°	266.6	13.3
20°-30°	366.4	18.3
30°-40°	388.3	19.4
40°-50°	338.9	16.9
50°-60°	257.5	12.8
60°-70°	172.5	8.6
70°-80°	88.9	4.4
80°-90°	26.7	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°	731.9	36.5
0°-40°	1120.2	55.9
0°-60°	1716.6	85.6
0°-90°	2004.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1038	1049	1049	1057	1065	97
15°	901	918	940	982	1015	253
25°	721	744	783	848	908	331
35°	519	549	604	689	770	324
45°	314	345	422	522	612	248
55°	207	214	244	358	454	186
65°	131	135	153	204	278	130
75°	69	74	83	89	103	74
85°	20	26	26	24	21	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.4	1069.4	1069.4	1069.4	1069.4
2.5°	1061.9	1069.4	1063.0	1063.0	1065.1
5°	1038.4	1049.1	1049.1	1056.6	1065.1
7.5°	1009.6	1021.3	1027.7	1044.8	1057.7
10°	976.5	989.3	1001.0	1026.7	1045.9
12.5°	941.2	955.1	973.3	1006.4	1033.1
15°	900.6	917.7	940.1	981.8	1014.9
17.5°	860.0	877.1	904.9	954.0	991.4
20°	816.2	834.4	867.5	920.9	965.8
22.5°	769.2	789.5	824.8	885.7	938.0
25°	721.1	743.6	783.1	848.3	908.1
27.5°	670.9	697.6	740.4	809.8	876.0
30°	620.7	647.4	694.4	770.3	840.8
32.5°	570.5	599.3	650.6	730.7	806.6
35°	519.2	549.1	603.6	689.1	770.3
37.5°	469.0	498.9	559.8	648.5	730.7
40°	416.7	447.6	513.9	606.8	692.3
42.5°	363.2	396.4	467.9	564.1	652.8
45°	314.1	345.1	422.0	522.4	612.2
47.5°	277.8	298.1	376.1	479.7	572.6
50°	253.2	263.9	329.0	438.0	531.0
52.5°	228.6	237.2	285.2	395.3	491.4
55°	207.3	213.7	243.6	357.9	454.0
57.5°	185.9	192.3	211.5	320.5	410.2
60°	166.7	172.0	188.0	281.0	368.6
62.5°	148.5	152.8	169.9	243.6	323.7
65°	131.4	134.6	152.8	204.1	277.8
67.5°	114.3	117.5	135.7	166.7	228.6
70°	99.4	100.4	117.5	135.7	183.8
72.5°	84.4	85.5	99.4	110.0	141.0
75°	69.4	73.7	83.3	88.7	102.6
77.5°	56.6	62.0	67.3	69.4	69.4
80°	43.8	50.2	52.3	52.3	50.2
82.5°	32.1	37.4	38.5	36.3	34.2
85°	20.3	25.6	25.6	23.5	21.4
87.5°	9.6	13.9	13.9	12.8	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)