

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: P1061787

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

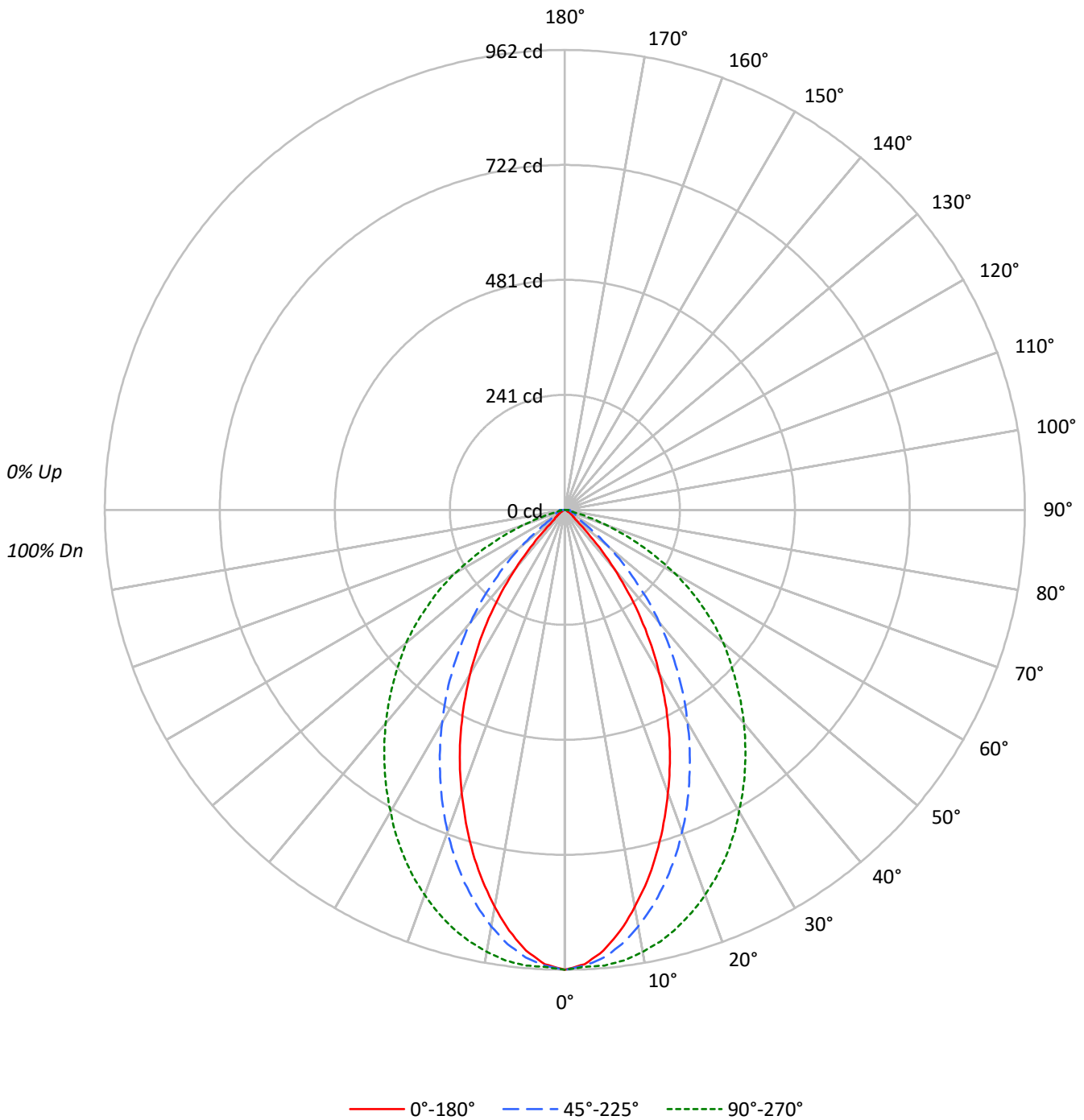
Lumens per Lamp: N/A
Luminaire Lumens: 1244.7 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			80	
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59			59	
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45			45	
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41			41	
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38			38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6624	6624	6624
5°	6398	6494	6612
10°	5897	6188	6561
15°	5295	5760	6454
20°	4621	5255	6282
25°	3914	4686	6066
30°	3144	4079	5796
35°	2327	3441	5526
40°	1441	2748	5236
45°	562	2009	4923
50°	264	1260	4637
55°	192	539	4209
60°	132	383	3651
65°	86	401	2838
70°	87	366	1786
75°	114	370	569
80°	170	424	381
85°	253	845	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4923 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	7.1
10°-20°	228.6	18.4
20°-30°	291.1	23.4
30°-40°	271.0	21.8
40°-50°	186.5	15.0
50°-60°	105.6	8.5
60°-70°	49.9	4.0
70°-80°	15.6	1.3
80°-90°	8.1	0.7
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°	608.0	48.8
0°-40°	878.9	70.6
0°-60°	1171.1	94.1
0°-90°	1244.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1244.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	926	938	940	948	957	86
15°	743	768	808	869	905	207
25°	515	548	617	720	798	235
35°	277	315	409	549	657	171
45°	58	92	206	373	506	54
55°	16	18	45	215	351	15
65°	5	6	25	77	174	6
75°	4	10	14	15	21	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.0	962.0	962.0	962.0	962.0
2.5°	951.3	961.0	954.5	955.6	956.7
5°	925.7	938.5	939.6	948.1	956.7
7.5°	888.3	904.3	916.1	936.4	950.3
10°	843.4	862.6	885.1	918.2	938.5
12.5°	795.3	817.7	848.7	895.8	924.6
15°	742.9	767.5	808.1	869.0	905.4
17.5°	687.3	715.1	764.3	837.0	882.9
20°	630.7	660.6	717.2	800.6	857.3
22.5°	574.0	605.0	668.1	761.1	829.5
25°	515.2	548.4	616.8	720.5	798.5
27.5°	455.4	489.6	565.5	678.8	765.4
30°	395.5	431.8	513.1	636.0	729.0
32.5°	336.7	373.1	461.8	593.3	693.7
35°	276.9	315.3	409.4	549.4	657.4
37.5°	217.0	258.7	358.1	504.5	620.0
40°	160.3	199.9	305.7	460.7	582.6
42.5°	106.9	145.4	258.7	416.9	544.1
45°	57.7	91.9	206.3	373.1	505.6
47.5°	31.0	49.2	161.4	330.3	468.2
50°	24.6	27.8	117.6	290.7	432.9
52.5°	20.3	22.4	77.0	253.3	392.3
55°	16.0	18.2	44.9	214.9	350.6
57.5°	12.8	15.0	28.9	178.5	310.0
60°	9.6	11.8	27.8	143.2	265.1
62.5°	7.5	8.6	25.7	110.1	218.1
65°	5.3	6.4	24.6	77.0	174.2
67.5°	4.3	5.3	22.4	49.2	130.4
70°	4.3	4.3	18.2	32.1	88.7
72.5°	4.3	7.5	16.0	21.4	53.4
75°	4.3	9.6	13.9	15.0	21.4
77.5°	4.3	10.7	11.8	11.8	11.8
80°	4.3	9.6	10.7	10.7	9.6
82.5°	4.3	8.6	9.6	10.7	8.6
85°	3.2	8.6	10.7	9.6	7.5
87.5°	3.2	8.6	9.6	8.6	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)