

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: P1175436

Luminaire Tested: S125RDR-H850D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D950-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

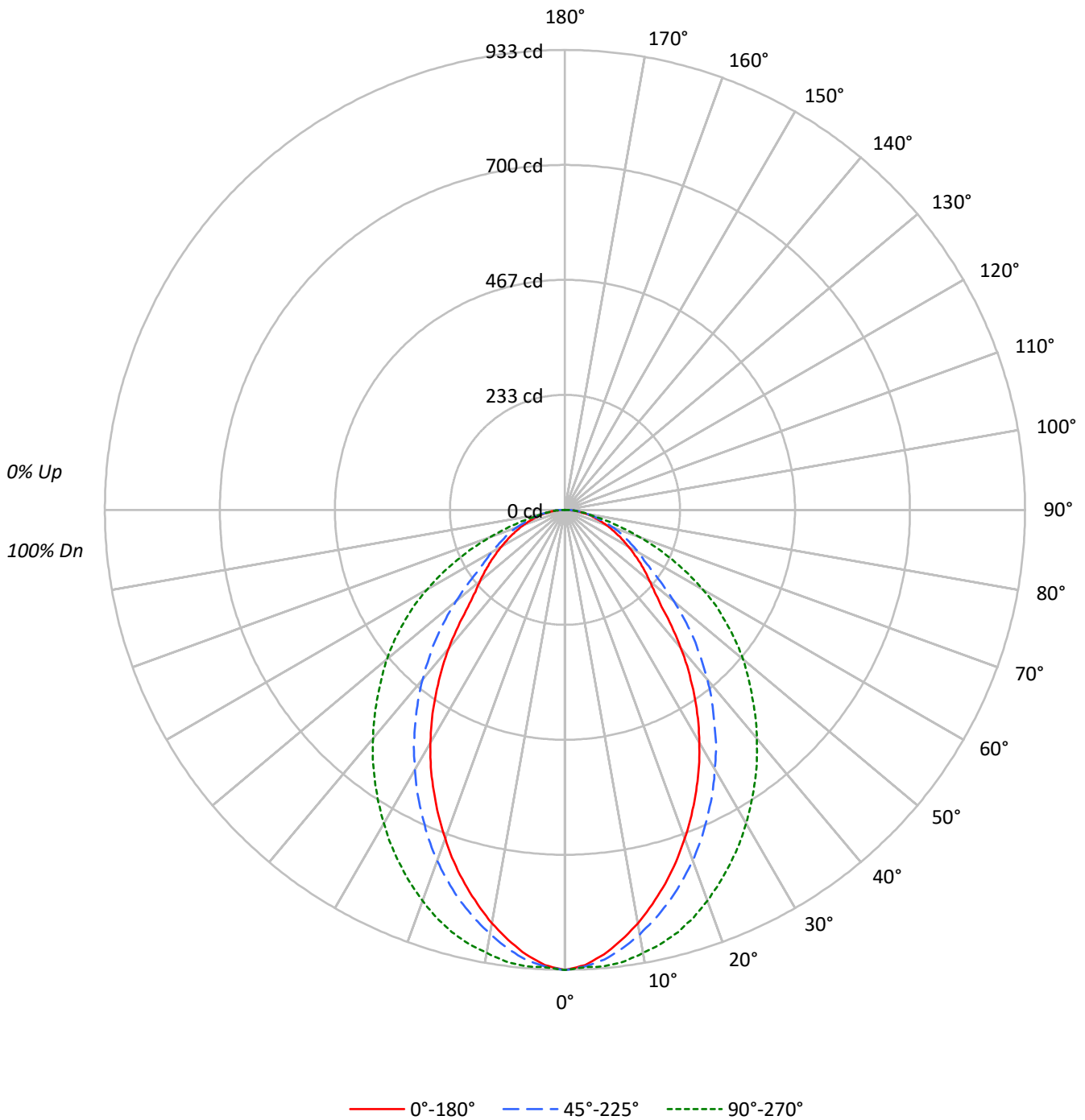
Lumens per Lamp: N/A
Luminaire Lumens: 1758.6 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	73	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	66	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	47	59	52	47	58	51	47	56	51	46	44				44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6427	6427	6427
5°	6260	6331	6424
10°	5955	6111	6382
15°	5598	5851	6321
20°	5202	5550	6183
25°	4780	5201	6020
30°	4335	4832	5840
35°	3836	4442	5648
40°	3291	4038	5441
45°	2700	3596	5231
50°	2402	3089	5050
55°	2216	2587	4794
60°	2041	2358	4441
65°	1898	2221	3925
70°	1772	2074	3207
75°	1665	1918	2402
80°	1570	1760	1729
85°	1438	1754	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	4.9
10°-20°	232.9	13.2
20°-30°	320.4	18.2
30°-40°	339.9	19.3
40°-50°	297.5	16.9
50°-60°	228.3	13.0
60°-70°	152.0	8.6
70°-80°	78.0	4.4
80°-90°	23.1	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°	639.8	36.4
0°-40°	979.7	55.7
0°-60°	1505.4	85.6
0°-90°	1758.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1758.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	906	918	916	922	930	85
15°	785	804	821	860	887	220
25°	629	651	685	742	792	289
35°	456	478	528	606	672	284
45°	277	300	369	461	537	219
55°	185	189	216	320	399	165
65°	116	117	136	179	241	116
75°	63	67	72	76	90	67
85°	18	21	22	21	18	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	933.4	933.4	933.4	933.4	933.4
2.5°	924.7	934.2	927.1	927.9	928.7
5°	905.7	917.6	916.0	922.3	929.5
7.5°	880.3	893.0	897.0	912.8	923.9
10°	851.8	866.1	874.0	897.8	912.8
12.5°	819.3	836.0	848.6	879.6	901.7
15°	785.3	803.5	820.9	859.7	886.7
17.5°	748.8	767.0	790.0	834.4	866.9
20°	710.0	729.8	757.5	805.1	843.9
22.5°	670.4	691.0	722.7	775.0	819.3
25°	629.2	650.6	684.6	742.5	792.4
27.5°	588.7	608.6	648.2	710.0	764.7
30°	545.2	565.8	607.8	675.9	734.5
32.5°	501.6	522.2	570.5	641.8	703.6
35°	456.4	477.8	528.5	606.2	671.9
37.5°	411.3	433.4	489.7	569.7	639.5
40°	366.1	389.9	449.3	533.3	605.4
42.5°	320.1	345.5	408.1	497.6	572.1
45°	277.3	300.3	369.3	461.2	537.2
47.5°	246.4	259.9	328.0	423.9	504.0
50°	224.2	230.6	288.4	388.3	471.5
52.5°	204.4	208.4	249.6	355.0	435.8
55°	184.6	188.6	215.5	320.1	399.4
57.5°	165.6	168.0	190.2	285.3	362.9
60°	148.2	149.8	171.2	250.4	322.5
62.5°	132.3	133.1	152.9	214.7	282.1
65°	116.5	117.3	136.3	179.1	240.9
67.5°	102.2	102.2	120.4	146.6	201.3
70°	88.0	88.0	103.0	118.9	159.3
72.5°	75.3	76.9	87.2	95.9	124.4
75°	62.6	66.6	72.1	76.1	90.3
77.5°	50.7	55.5	57.8	59.4	60.2
80°	39.6	42.8	44.4	45.2	43.6
82.5°	29.3	31.7	32.5	32.5	30.1
85°	18.2	20.6	22.2	21.4	18.2
87.5°	8.7	11.9	12.7	11.1	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)