

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: P1175429

Luminaire Tested: S125RDR-H850D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175429  
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-H850D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

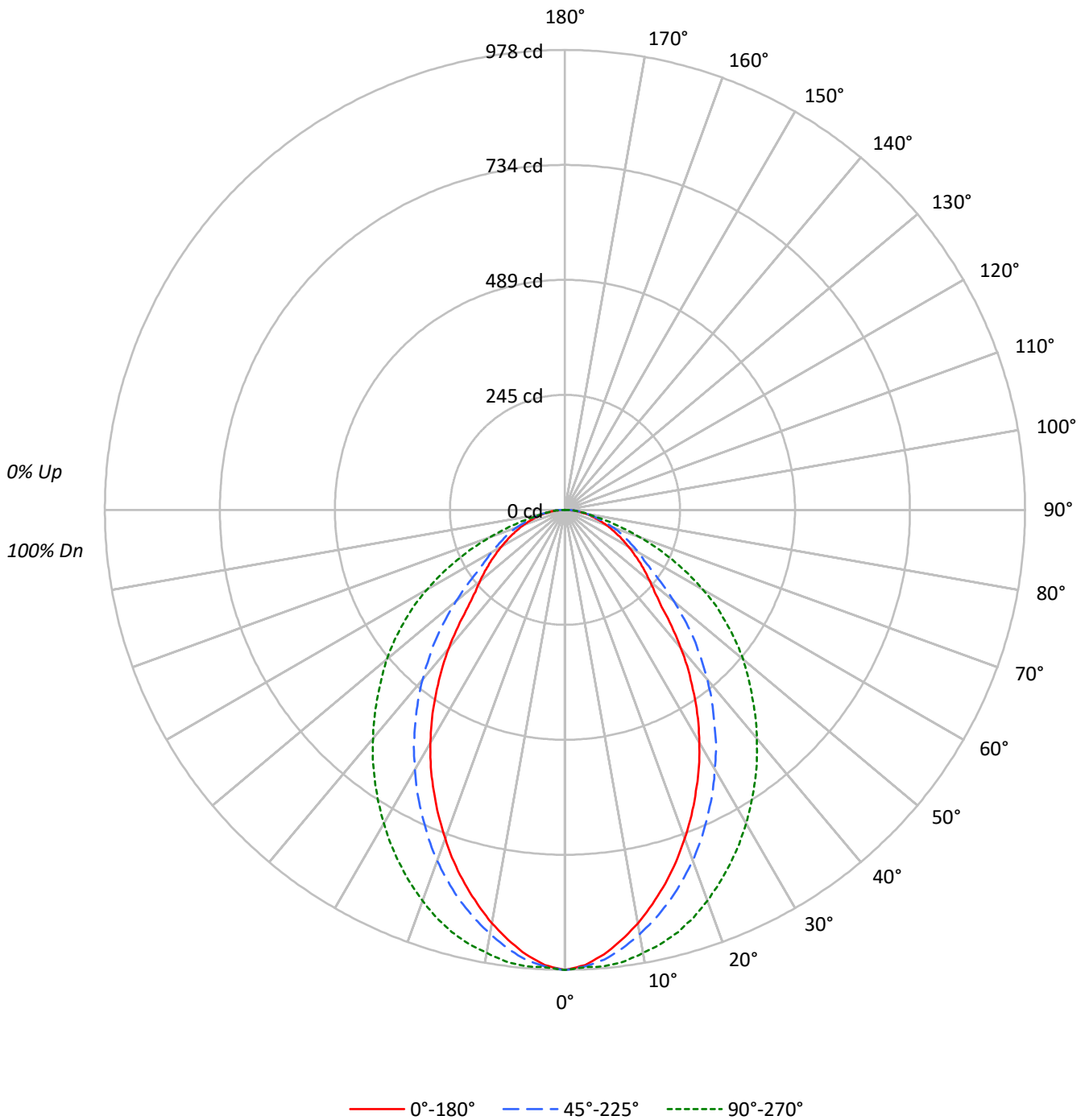
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1843.3 lumens  
Efficiency: N/A  
Efficacy: 78.4 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°	6737	6737	6737
5°	6562	6636	6734
10°	6243	6405	6689
15°	5867	6134	6625
20°	5453	5818	6482
25°	5010	5452	6310
30°	4544	5065	6122
35°	4021	4657	5920
40°	3449	4232	5704
45°	2831	3769	5483
50°	2518	3238	5294
55°	2323	2712	5025
60°	2139	2470	4656
65°	1989	2328	4114
70°	1856	2174	3362
75°	1745	2011	2519
80°	1645	1844	1812
85°	1509	1841	1509

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5483 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	4.9
10°-20°	244.2	13.2
20°-30°	335.9	18.2
30°-40°	356.3	19.3
40°-50°	311.8	16.9
50°-60°	239.3	13.0
60°-70°	159.4	8.6
70°-80°	81.7	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°	670.6	36.4
0°-40°	1026.9	55.7
0°-60°	1578.0	85.6
0°-90°	1843.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	949	962	960	967	974	89
15°	823	842	860	901	929	231
25°	660	682	718	778	831	303
35°	478	501	554	635	704	298
45°	291	315	387	483	563	230
55°	194	198	226	336	419	173
65°	122	123	143	188	252	122
75°	66	70	76	80	95	70
85°	19	22	23	22	19	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	978.4	978.4	978.4	978.4	978.4
2.5°	969.3	979.3	971.8	972.6	973.5
5°	949.4	961.8	960.2	966.8	974.3
7.5°	922.8	936.1	940.2	956.8	968.5
10°	892.9	907.8	916.1	941.1	956.8
12.5°	858.8	876.3	889.6	922.0	945.2
15°	823.1	842.2	860.5	901.2	929.4
17.5°	784.9	804.0	828.1	874.6	908.7
20°	744.2	765.0	794.1	843.9	884.6
22.5°	702.7	724.3	757.5	812.3	858.8
25°	659.5	681.9	717.6	778.3	830.6
27.5°	617.1	637.9	679.4	744.2	801.5
30°	571.5	593.0	637.1	708.5	770.0
32.5°	525.8	547.4	598.0	672.8	737.6
35°	478.4	500.9	554.0	635.4	704.3
37.5°	431.1	454.3	513.3	597.2	670.3
40°	383.7	408.7	470.9	559.0	634.6
42.5°	335.6	362.1	427.8	521.6	599.7
45°	290.7	314.8	387.1	483.4	563.1
47.5°	258.3	272.4	343.9	444.4	528.3
50°	235.1	241.7	302.3	407.0	494.2
52.5°	214.3	218.4	261.6	372.1	456.8
55°	193.5	197.7	225.9	335.6	418.6
57.5°	173.6	176.1	199.3	299.0	380.4
60°	155.3	157.0	179.4	262.5	338.1
62.5°	138.7	139.5	160.3	225.1	295.7
65°	122.1	122.9	142.9	187.7	252.5
67.5°	107.1	107.1	126.3	153.7	211.0
70°	92.2	92.2	108.0	124.6	167.0
72.5°	78.9	80.6	91.4	100.5	130.4
75°	65.6	69.8	75.6	79.7	94.7
77.5°	53.2	58.1	60.6	62.3	63.1
80°	41.5	44.9	46.5	47.3	45.7
82.5°	30.7	33.2	34.1	34.1	31.6
85°	19.1	21.6	23.3	22.4	19.1
87.5°	9.1	12.5	13.3	11.6	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)