

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: P1175434

Luminaire Tested: S125RDR-H850D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175434  
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-H850D935-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, 90 CRI LEDS  
Ballast/Driver: -

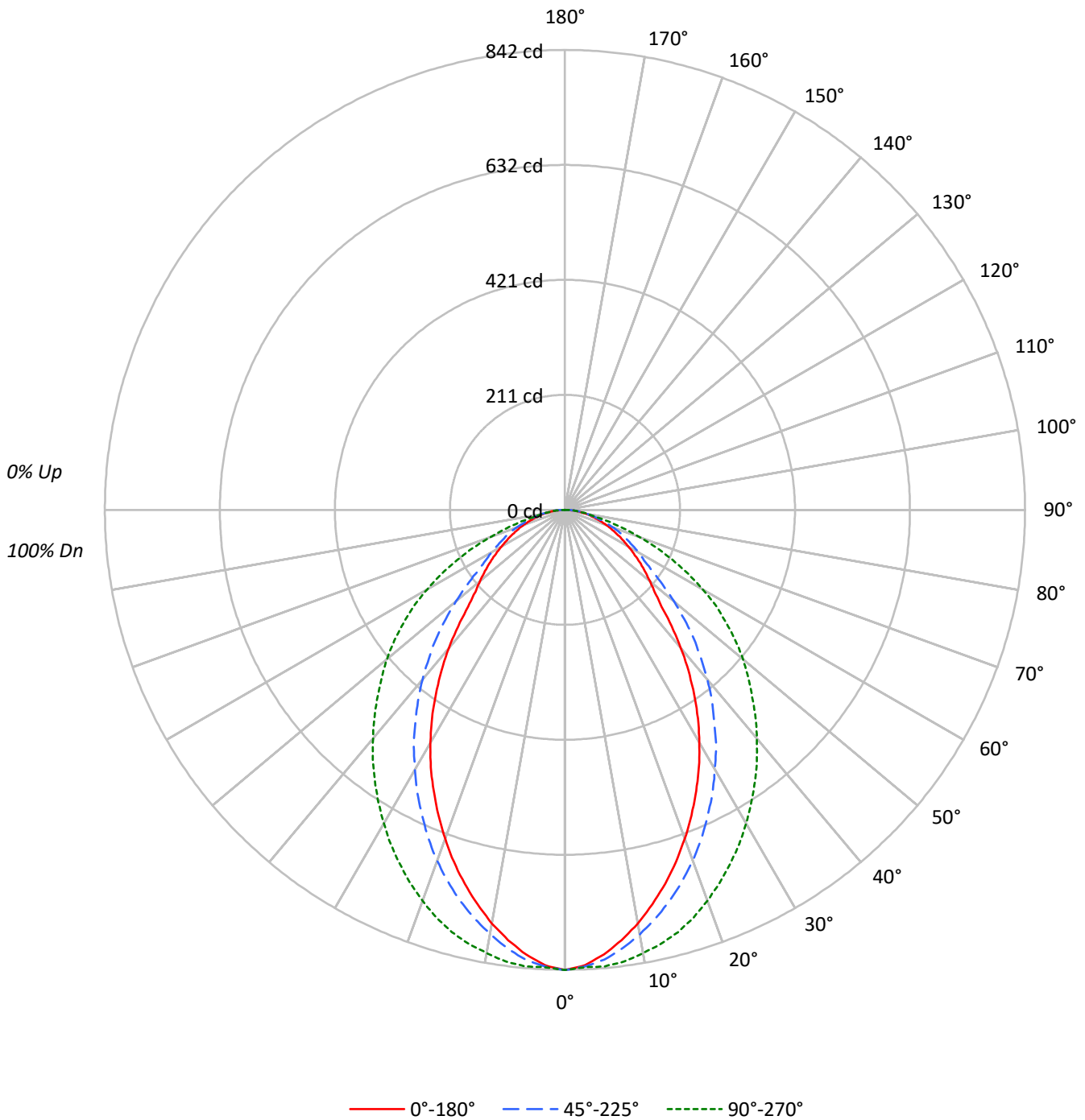
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1587.1 lumens  
Efficiency: N/A  
Efficacy: 67.5 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°	5800	5800	5800
5°	5649	5714	5798
10°	5375	5515	5760
15°	5052	5281	5704
20°	4695	5010	5580
25°	4314	4694	5433
30°	3912	4361	5270
35°	3462	4009	5097
40°	2970	3645	4911
45°	2437	3245	4722
50°	2168	2788	4558
55°	2000	2335	4326
60°	1841	2128	4009
65°	1712	2004	3542
70°	1598	1872	2893
75°	1503	1732	2168
80°	1419	1586	1558
85°	1296	1580	1296

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4722 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	4.9
10°-20°	210.2	13.2
20°-30°	289.2	18.2
30°-40°	306.7	19.3
40°-50°	268.5	16.9
50°-60°	206.0	13.0
60°-70°	137.2	8.6
70°-80°	70.4	4.4
80°-90°	20.9	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°	577.4	36.4
0°-40°	884.2	55.7
0°-60°	1358.6	85.6
0°-90°	1587.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	817	828	827	832	839	76
15°	709	725	741	776	800	199
25°	568	587	618	670	715	261
35°	412	431	477	547	606	257
45°	250	271	333	416	485	198
55°	167	170	194	289	360	149
65°	105	106	123	162	217	105
75°	56	60	65	69	82	60
85°	16	19	20	19	16	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	842.4	842.4	842.4	842.4	842.4
2.5°	834.6	843.2	836.7	837.4	838.1
5°	817.4	828.1	826.7	832.4	838.9
7.5°	794.5	806.0	809.5	823.8	833.9
10°	768.8	781.7	788.8	810.3	823.8
12.5°	739.5	754.5	765.9	793.8	813.8
15°	708.7	725.2	740.9	775.9	800.2
17.5°	675.8	692.3	713.0	753.0	782.4
20°	640.8	658.6	683.7	726.6	761.6
22.5°	605.0	623.6	652.2	699.4	739.5
25°	567.8	587.1	617.9	670.1	715.1
27.5°	531.4	549.2	585.0	640.8	690.1
30°	492.0	510.6	548.5	610.0	662.9
32.5°	452.7	471.3	514.9	579.3	635.0
35°	411.9	431.2	477.0	547.1	606.4
37.5°	371.2	391.2	442.0	514.2	577.1
40°	330.4	351.9	405.5	481.3	546.4
42.5°	288.9	311.8	368.3	449.1	516.3
45°	250.3	271.0	333.3	416.2	484.9
47.5°	222.4	234.6	296.1	382.6	454.8
50°	202.4	208.1	260.3	350.4	425.5
52.5°	184.5	188.1	225.3	320.4	393.3
55°	166.6	170.2	194.5	288.9	360.4
57.5°	149.5	151.6	171.6	257.5	327.5
60°	133.7	135.2	154.5	226.0	291.1
62.5°	119.4	120.1	138.0	193.8	254.6
65°	105.1	105.8	123.0	161.6	217.4
67.5°	92.3	92.3	108.7	132.3	181.6
70°	79.4	79.4	93.0	107.3	143.7
72.5°	67.9	69.4	78.7	86.5	112.3
75°	56.5	60.1	65.1	68.7	81.5
77.5°	45.8	50.1	52.2	53.6	54.4
80°	35.8	38.6	40.0	40.8	39.3
82.5°	26.5	28.6	29.3	29.3	27.2
85°	16.4	18.6	20.0	19.3	16.4
87.5°	7.9	10.7	11.4	10.0	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)