

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: P1056490

Luminaire Tested: S125R3DR-S850D950-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056490  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S850D950-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

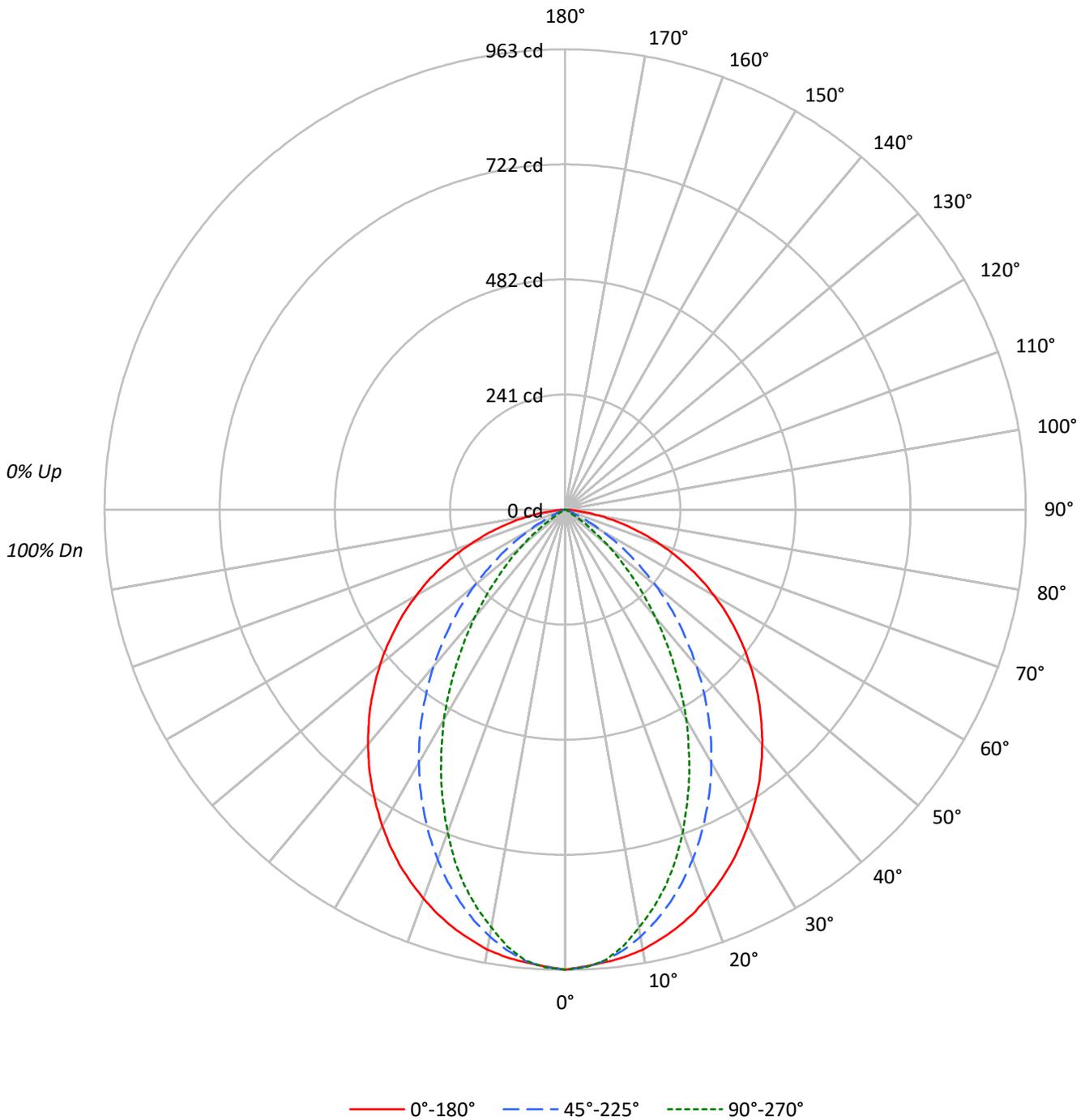
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1560.2 lumens  
Efficiency: N/A  
Efficacy: 59.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78				78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69				69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61				61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55				55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49				49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45				45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34				34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6805	6805	6805
5°	6749	6729	6722
10°	6711	6513	6376
15°	6626	6221	5956
20°	6516	5863	5405
25°	6392	5447	4792
30°	6238	4992	4143
35°	6084	4487	3425
40°	5916	3944	2711
45°	5742	3367	1965
50°	5551	2718	1269
55°	5338	1987	564
60°	5086	1227	161
65°	4771	447	95
70°	4318	157	39
75°	3753	52	27
80°	2874	41	0
85°	1314	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5742 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	5.7
10°-20°	240.1	15.4
20°-30°	324.8	20.8
30°-40°	333.6	21.4
40°-50°	276.4	17.7
50°-60°	177.5	11.4
60°-70°	85.7	5.5
70°-80°	29.0	1.9
80°-90°	3.7	0.2
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°	654.3	41.9
0°-40°	987.9	63.3
0°-60°	1441.8	92.4
0°-90°	1560.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1560.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	951	959	948	943	947	90
15°	905	894	850	820	814	255
25°	820	779	698	635	614	377
35°	705	637	520	429	397	441
45°	574	480	337	233	196	443
55°	433	318	161	71	46	387
65°	285	157	27	8	6	282
75°	137	30	2	1	1	146
85°	16	0	0	0	0	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	962.6	962.6	962.6	962.6	962.6
2.5°	956.9	964.5	957.8	956.9	958.8
5°	951.1	958.8	948.3	942.6	947.3
7.5°	944.5	948.3	930.2	920.6	922.5
10°	934.9	934.0	907.3	891.0	888.2
12.5°	920.6	915.8	880.5	857.6	852.9
15°	905.3	893.9	850.0	820.4	813.8
17.5°	887.2	869.1	816.6	778.5	768.9
20°	866.2	841.4	779.4	732.7	718.4
22.5°	843.3	811.9	740.3	685.0	665.9
25°	819.5	779.4	698.3	635.4	614.4
27.5°	792.8	746.0	656.4	584.8	559.0
30°	764.2	710.7	611.5	533.3	507.5
32.5°	734.6	675.4	566.7	481.8	450.3
35°	705.0	637.3	519.9	429.3	396.9
37.5°	673.5	599.1	474.1	379.7	344.4
40°	641.1	560.0	427.4	328.2	293.8
42.5°	607.7	519.9	380.6	279.5	244.2
45°	574.3	479.9	336.8	232.8	196.5
47.5°	540.0	438.8	291.0	187.0	155.5
50°	504.7	398.8	247.1	146.0	115.4
52.5°	469.4	357.8	202.2	105.9	78.2
55°	433.1	317.7	161.2	70.6	45.8
57.5°	396.9	276.7	123.1	39.1	17.2
60°	359.7	237.5	86.8	13.4	11.4
62.5°	323.4	195.6	54.4	10.5	8.6
65°	285.2	157.4	26.7	7.6	5.7
67.5°	248.0	121.2	11.4	4.8	2.9
70°	208.9	87.8	7.6	2.9	1.9
72.5°	172.7	56.3	4.8	1.9	1.0
75°	137.4	29.6	1.9	1.0	1.0
77.5°	103.0	12.4	1.0	1.0	1.0
80°	70.6	5.7	1.0	1.0	0.0
82.5°	42.0	1.9	1.0	1.0	0.0
85°	16.2	0.0	0.0	0.0	0.0
87.5°	1.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)