

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: P1056444

Luminaire Tested: S125R3DR-S610D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S610D835-X4F0-XX-UDD-FLL-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

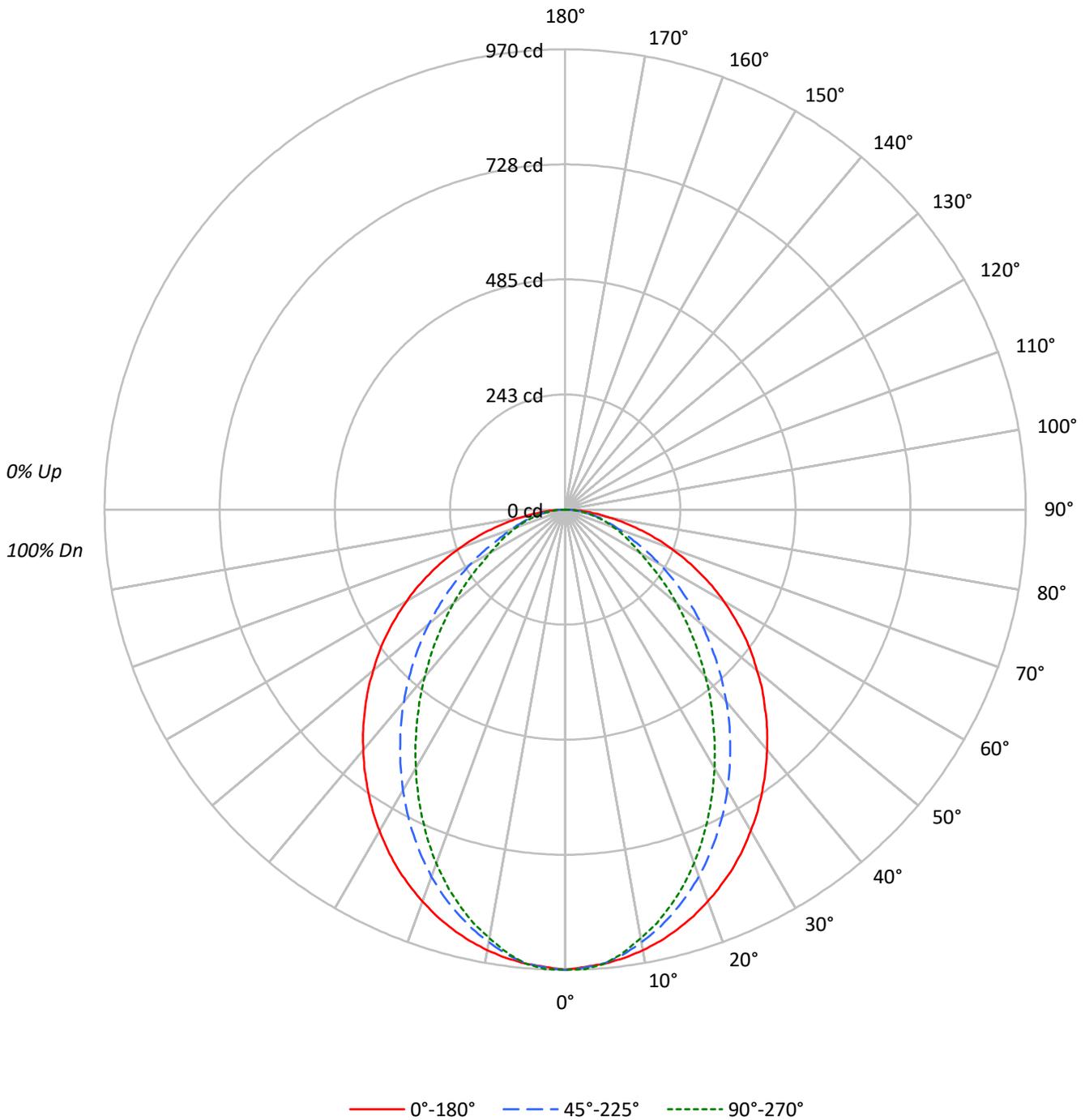
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2055.5 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
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				
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28				

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

	0°	45°	90°
0°	6856	6856	6856
5°	6816	6810	6816
10°	6770	6646	6583
15°	6702	6443	6310
20°	6611	6193	5970
25°	6512	5898	5565
30°	6384	5576	5135
35°	6245	5229	4687
40°	6105	4872	4245
45°	5957	4498	3805
50°	5798	4114	3368
55°	5652	3694	2928
60°	5452	3246	2573
65°	5182	2753	2392
70°	4866	2464	2238
75°	4398	2267	2111
80°	3823	2060	1970
85°	2985	1817	1817

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5957 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.7	4.4
10°-20°	249.2	12.1
20°-30°	351.9	17.1
30°-40°	387.5	18.8
40°-50°	361.4	17.6
50°-60°	288.5	14.0
60°-70°	194.1	9.4
70°-80°	103.4	5.0
80°-90°	28.7	1.4
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°	691.8	33.7
0°-40°	1079.3	52.5
0°-60°	1729.2	84.1
0°-90°	2055.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2055.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	960	968	960	957	960	91
15°	916	911	880	865	862	258
25°	835	810	756	723	714	384
35°	724	681	606	558	543	453
45°	596	539	450	395	381	460
55°	459	389	300	252	238	409
65°	310	242	165	146	143	307
75°	161	107	83	78	77	172
85°	37	25	22	23	22	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	969.8	969.8	969.8	969.8	969.8
2.5°	964.8	972.7	966.2	967.7	969.1
5°	960.5	968.4	959.7	956.8	960.5
7.5°	953.2	959.7	945.3	938.8	941.7
10°	943.1	947.5	925.8	917.1	917.1
12.5°	930.8	930.8	904.8	892.6	892.6
15°	915.7	910.6	880.3	865.1	862.2
17.5°	898.3	889.0	852.9	833.4	829.7
20°	878.8	863.7	823.2	798.0	793.6
22.5°	857.2	837.7	790.7	759.7	754.6
25°	834.8	809.5	756.1	722.9	713.5
27.5°	809.5	779.2	720.7	683.1	671.6
30°	782.1	747.4	683.1	641.3	629.0
32.5°	753.9	714.9	644.9	600.1	586.4
35°	723.6	681.0	605.9	558.2	543.1
37.5°	693.3	647.0	567.6	517.8	501.9
40°	661.5	610.9	527.9	476.6	460.0
42.5°	629.7	575.5	488.9	436.9	419.6
45°	595.8	539.4	449.9	395.0	380.6
47.5°	563.3	502.6	411.6	358.2	342.3
50°	527.2	464.3	374.1	320.6	306.2
52.5°	493.9	426.8	336.5	286.7	271.5
55°	458.6	389.2	299.7	252.0	237.6
57.5°	421.7	351.7	264.3	219.5	205.8
60°	385.6	314.1	229.6	188.5	182.0
62.5°	348.8	278.7	197.1	165.4	161.0
65°	309.8	241.9	164.6	145.9	143.0
67.5°	273.0	206.5	138.7	127.8	124.9
70°	235.4	171.1	119.2	109.8	108.3
72.5°	198.6	137.2	100.4	93.9	92.4
75°	161.0	106.9	83.0	78.0	77.3
77.5°	126.4	80.2	65.7	63.5	62.1
80°	93.9	59.9	50.6	49.1	48.4
82.5°	64.3	41.2	36.1	36.1	34.7
85°	36.8	25.3	22.4	23.1	22.4
87.5°	13.7	10.8	10.1	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)