

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: P1056445

Luminaire Tested: S125R3DR-S610D840-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056445  
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-S610D840-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

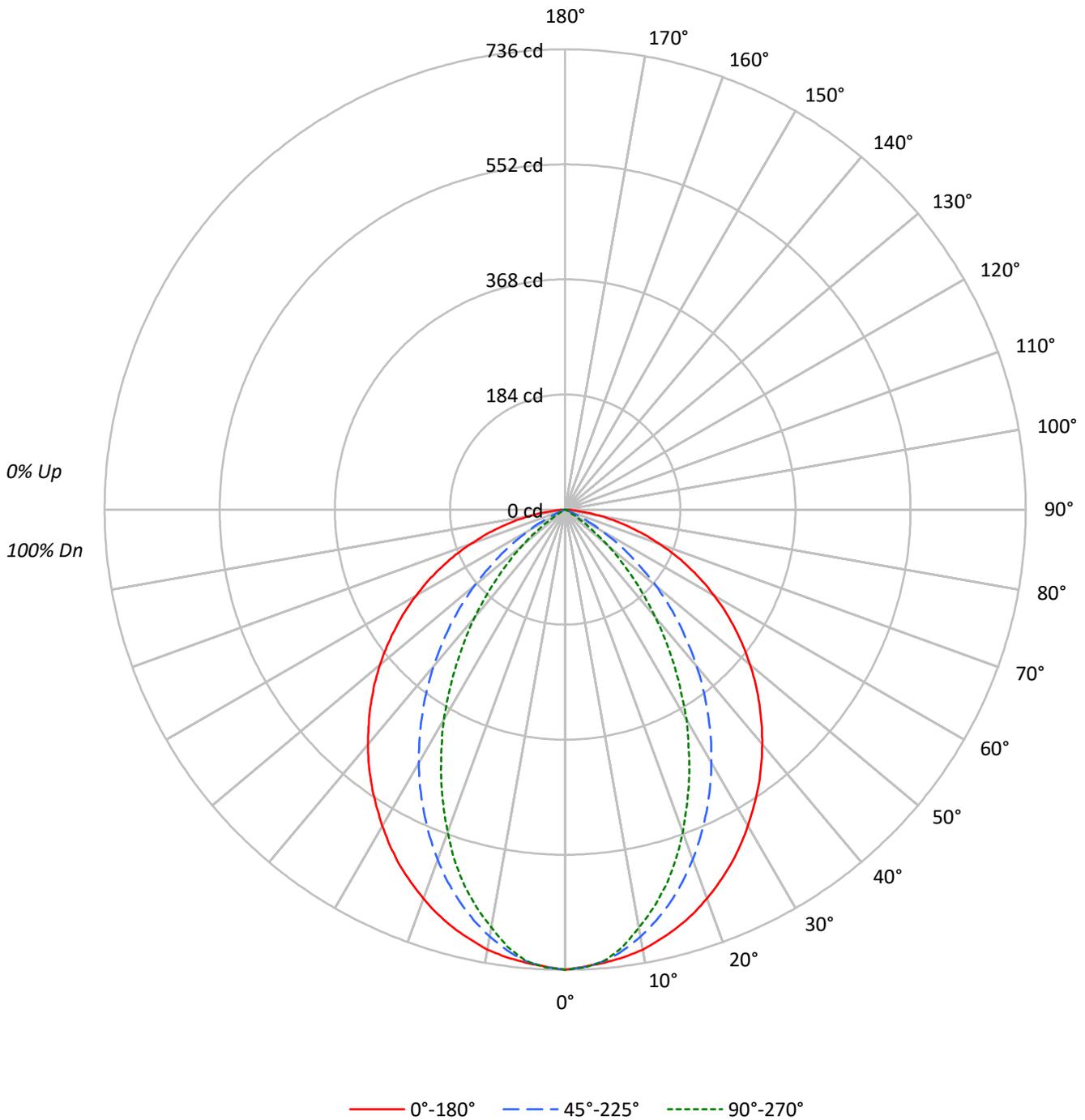
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1192.7 lumens  
Efficiency: N/A  
Efficacy: 62.4 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): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	5202	5202	5202
5°	5160	5144	5139
10°	5130	4978	4873
15°	5065	4756	4553
20°	4982	4482	4131
25°	4886	4164	3663
30°	4768	3816	3167
35°	4651	3430	2618
40°	4523	3015	2073
45°	4389	2573	1502
50°	4243	2078	970
55°	4081	1518	431
60°	3887	939	124
65°	3648	341	74
70°	3301	120	31
75°	2868	41	19
80°	2198	28	0
85°	1006	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4389 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	5.7
10°-20°	183.5	15.4
20°-30°	248.3	20.8
30°-40°	255.0	21.4
40°-50°	211.3	17.7
50°-60°	135.7	11.4
60°-70°	65.5	5.5
70°-80°	22.2	1.9
80°-90°	2.8	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°	500.1	41.9
0°-40°	755.2	63.3
0°-60°	1102.1	92.4
0°-90°	1192.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	736	736	736	736	736	
5°	727	733	725	720	724	69
15°	692	683	650	627	622	195
25°	626	596	534	486	470	288
35°	539	487	398	328	303	337
45°	439	367	257	178	150	339
55°	331	243	123	54	35	296
65°	218	120	20	6	4	216
75°	105	23	2	1	1	111
85°	12	0	0	0	0	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735.8	735.8	735.8	735.8	735.8
2.5°	731.5	737.3	732.2	731.5	732.9
5°	727.1	732.9	724.9	720.5	724.2
7.5°	722.0	724.9	711.0	703.7	705.2
10°	714.7	714.0	693.5	681.1	678.9
12.5°	703.7	700.1	673.1	655.6	652.0
15°	692.1	683.3	649.8	627.2	622.1
17.5°	678.2	664.4	624.3	595.1	587.8
20°	662.2	643.2	595.8	560.1	549.1
22.5°	644.7	620.6	565.9	523.6	509.0
25°	626.4	595.8	533.8	485.7	469.6
27.5°	606.0	570.3	501.7	447.0	427.4
30°	584.1	543.3	467.5	407.7	388.0
32.5°	561.5	516.3	433.2	368.3	344.2
35°	538.9	487.2	397.5	328.2	303.4
37.5°	514.9	458.0	362.4	290.2	263.3
40°	490.1	428.1	326.7	250.9	224.6
42.5°	464.5	397.5	291.0	213.7	186.7
45°	439.0	366.8	257.4	177.9	150.2
47.5°	412.8	335.5	222.4	142.9	118.9
50°	385.8	304.8	188.9	111.6	88.2
52.5°	358.8	273.5	154.6	80.9	59.8
55°	331.1	242.8	123.2	54.0	35.0
57.5°	303.4	211.5	94.1	29.9	13.1
60°	274.9	181.6	66.4	10.2	8.8
62.5°	247.2	149.5	41.6	8.0	6.6
65°	218.1	120.3	20.4	5.8	4.4
67.5°	189.6	92.6	8.8	3.6	2.2
70°	159.7	67.1	5.8	2.2	1.5
72.5°	132.0	43.0	3.6	1.5	0.7
75°	105.0	22.6	1.5	0.7	0.7
77.5°	78.8	9.5	0.7	0.7	0.7
80°	54.0	4.4	0.7	0.7	0.0
82.5°	32.1	1.5	0.7	0.7	0.0
85°	12.4	0.0	0.0	0.0	0.0
87.5°	0.7	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)