

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: P1056447

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056447
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-S610D840-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

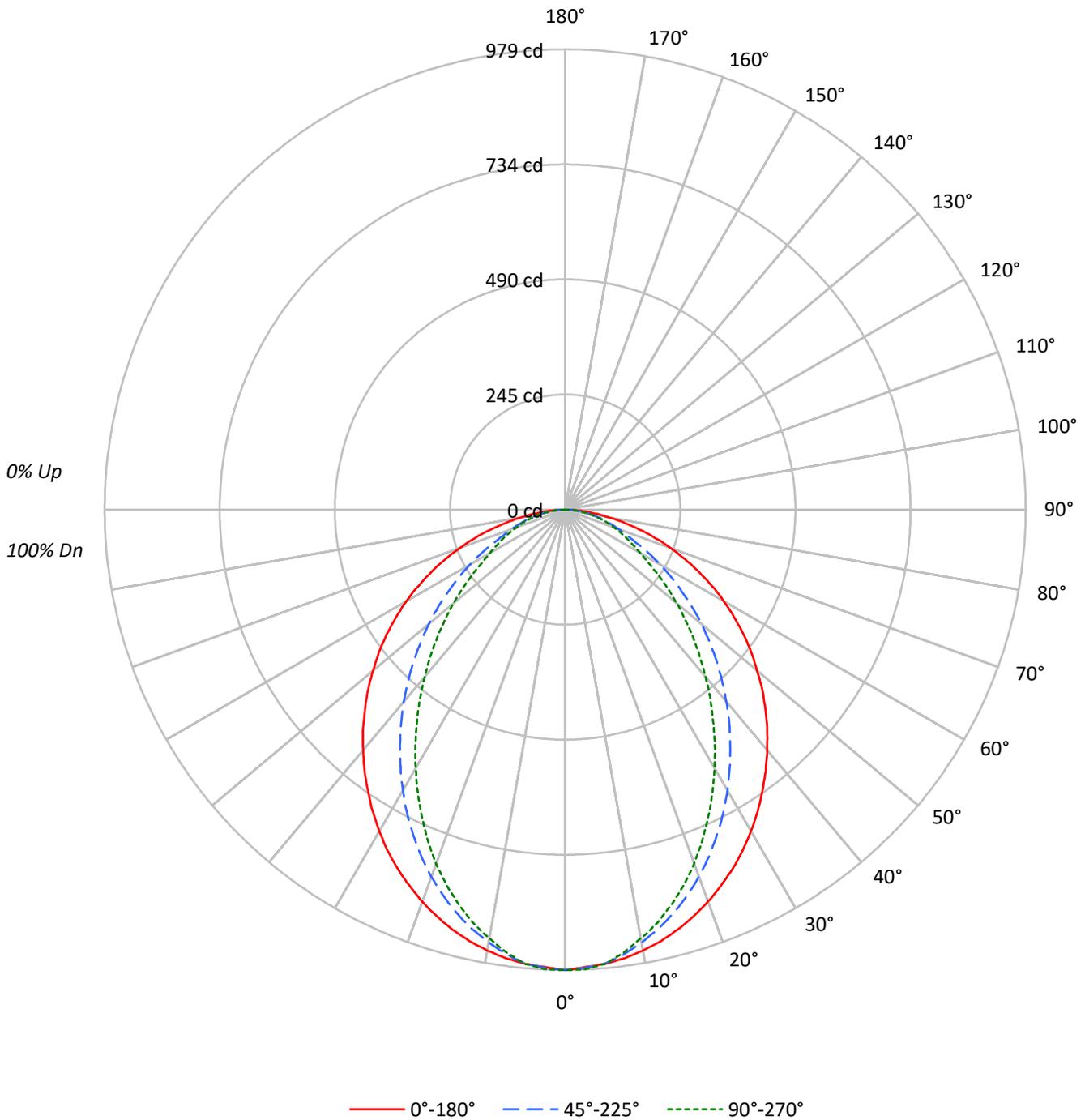
Lumens per Lamp: N/A
Luminaire Lumens: 2075.8 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86	86	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73	73	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55	55	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48	48	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43	43	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38	38	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34	34	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	28	28	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6924	6924	6924
5°	6883	6878	6883
10°	6837	6711	6649
15°	6768	6506	6372
20°	6677	6255	6030
25°	6576	5955	5620
30°	6447	5632	5185
35°	6306	5281	4733
40°	6165	4920	4287
45°	6015	4542	3842
50°	5855	4155	3401
55°	5708	3730	2957
60°	5506	3279	2599
65°	5234	2782	2415
70°	4913	2487	2261
75°	4441	2292	2130
80°	3859	2076	1991
85°	3017	1833	1833

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6015 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	4.4
10°-20°	251.6	12.1
20°-30°	355.4	17.1
30°-40°	391.3	18.8
40°-50°	365.0	17.6
50°-60°	291.4	14.0
60°-70°	196.1	9.4
70°-80°	104.4	5.0
80°-90°	29.0	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°	698.7	33.7
0°-40°	1090.0	52.5
0°-60°	1746.3	84.1
0°-90°	2075.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2075.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	979	979	979	979	979	
5°	970	978	969	966	970	92
15°	925	920	889	874	871	261
25°	843	818	764	730	720	388
35°	731	688	612	564	548	457
45°	602	545	454	399	384	464
55°	463	393	303	254	240	413
65°	313	244	166	147	144	310
75°	163	108	84	79	78	173
85°	37	26	23	23	23	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	979.4	979.4	979.4	979.4	979.4
2.5°	974.3	982.3	975.8	977.2	978.7
5°	969.9	977.9	969.2	966.3	969.9
7.5°	962.6	969.2	954.6	948.0	951.0
10°	952.4	956.8	934.9	926.2	926.2
12.5°	940.0	940.0	913.8	901.4	901.4
15°	924.7	919.6	889.0	873.7	870.7
17.5°	907.2	897.7	861.3	841.6	837.9
20°	887.5	872.2	831.4	805.8	801.5
22.5°	865.6	846.0	798.5	767.2	762.1
25°	843.0	817.5	763.5	730.0	720.5
27.5°	817.5	786.9	727.8	689.9	678.2
30°	789.8	754.8	689.9	647.6	635.2
32.5°	761.4	722.0	651.2	606.0	592.2
35°	730.7	687.7	611.9	563.7	548.4
37.5°	700.1	653.4	573.2	522.9	506.8
40°	668.0	617.0	533.1	481.3	464.5
42.5°	635.9	581.2	493.7	441.2	423.7
45°	601.6	544.8	454.3	398.9	384.3
47.5°	568.8	507.6	415.7	361.7	345.7
50°	532.4	468.9	377.8	323.8	309.2
52.5°	498.8	431.0	339.8	289.5	274.2
55°	463.1	393.1	302.6	254.5	239.9
57.5°	425.9	355.2	266.9	221.7	207.8
60°	389.4	317.2	231.9	190.3	183.8
62.5°	352.2	281.5	199.1	167.0	162.6
65°	312.9	244.3	166.3	147.3	144.4
67.5°	275.7	208.6	140.0	129.1	126.2
70°	237.7	172.8	120.3	110.8	109.4
72.5°	200.5	138.6	101.4	94.8	93.3
75°	162.6	107.9	83.9	78.8	78.0
77.5°	127.6	80.9	66.4	64.2	62.7
80°	94.8	60.5	51.0	49.6	48.9
82.5°	64.9	41.6	36.5	36.5	35.0
85°	37.2	25.5	22.6	23.3	22.6
87.5°	13.9	10.9	10.2	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)