

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: P1056460

Luminaire Tested: S125R3DR-S610D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056460
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-S610D940-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, 90 CRI LEDS
Ballast/Driver: -

Summary

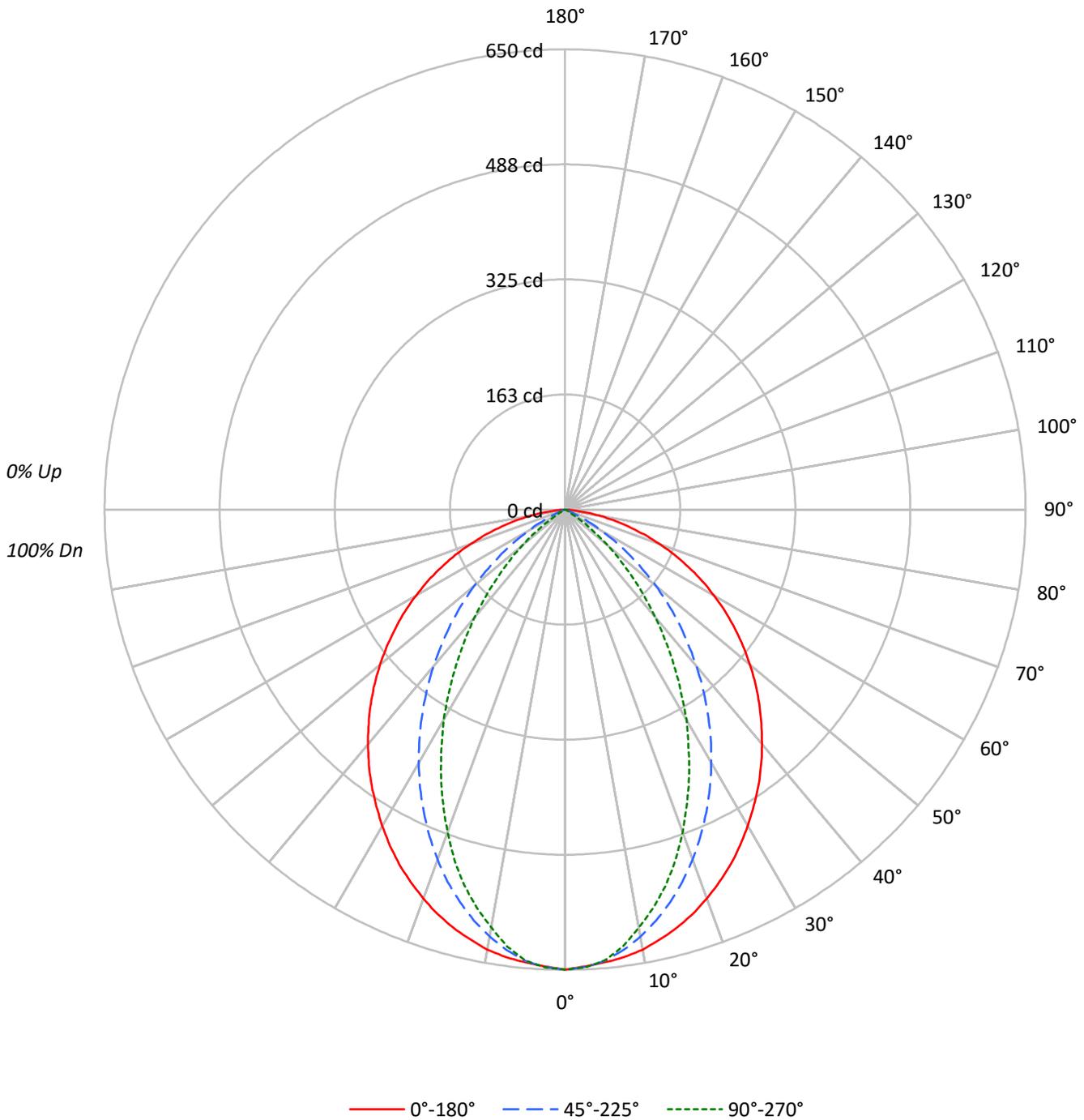
Lumens per Lamp: N/A
Luminaire Lumens: 1053.1 lumens
Efficiency: N/A
Efficacy: 55.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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°	4593	4593	4593
5°	4556	4542	4537
10°	4530	4396	4303
15°	4472	4199	4020
20°	4399	3958	3648
25°	4314	3677	3235
30°	4210	3370	2797
35°	4107	3028	2312
40°	3993	2662	1830
45°	3876	2272	1327
50°	3746	1834	857
55°	3604	1341	381
60°	3433	829	109
65°	3220	301	65
70°	2914	107	27
75°	2532	36	16
80°	1942	24	0
85°	884	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3876 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	5.7
10°-20°	162.0	15.4
20°-30°	219.2	20.8
30°-40°	225.2	21.4
40°-50°	186.6	17.7
50°-60°	119.8	11.4
60°-70°	57.9	5.5
70°-80°	19.6	1.9
80°-90°	2.5	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°	441.6	41.9
0°-40°	666.8	63.3
0°-60°	973.2	92.4
0°-90°	1053.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1053.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	642	647	640	636	639	61
15°	611	603	574	554	549	172
25°	553	526	471	429	415	255
35°	476	430	351	290	268	297
45°	388	324	227	157	133	299
55°	292	214	109	48	31	261
65°	192	106	18	5	4	190
75°	93	20	1	1	1	98
85°	11	0	0	0	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	649.7	649.7	649.7	649.7	649.7
2.5°	645.9	651.0	646.5	645.9	647.2
5°	642.0	647.2	640.1	636.2	639.4
7.5°	637.5	640.1	627.8	621.4	622.7
10°	631.1	630.4	612.4	601.4	599.5
12.5°	621.4	618.2	594.4	578.9	575.7
15°	611.1	603.4	573.8	553.8	549.3
17.5°	598.9	586.6	551.2	525.5	519.0
20°	584.7	568.0	526.1	494.5	484.9
22.5°	569.2	548.0	499.7	462.4	449.5
25°	553.1	526.1	471.4	428.9	414.7
27.5°	535.1	503.6	443.0	394.7	377.4
30°	515.8	479.7	412.8	360.0	342.6
32.5°	495.8	455.9	382.5	325.2	303.9
35°	475.9	430.2	350.9	289.8	267.9
37.5°	454.6	404.4	320.0	256.3	232.5
40°	432.7	378.0	288.5	221.5	198.3
42.5°	410.2	350.9	256.9	188.7	164.8
45°	387.7	323.9	227.3	157.1	132.7
47.5°	364.5	296.2	196.4	126.2	105.0
50°	340.6	269.2	166.8	98.5	77.9
52.5°	316.8	241.5	136.5	71.5	52.8
55°	292.4	214.4	108.8	47.7	30.9
57.5°	267.9	186.7	83.1	26.4	11.6
60°	242.8	160.3	58.6	9.0	7.7
62.5°	218.3	132.0	36.7	7.1	5.8
65°	192.5	106.3	18.0	5.2	3.9
67.5°	167.4	81.8	7.7	3.2	1.9
70°	141.0	59.2	5.2	1.9	1.3
72.5°	116.6	38.0	3.2	1.3	0.6
75°	92.7	20.0	1.3	0.6	0.6
77.5°	69.5	8.4	0.6	0.6	0.6
80°	47.7	3.9	0.6	0.6	0.0
82.5°	28.3	1.3	0.6	0.6	0.0
85°	10.9	0.0	0.0	0.0	0.0
87.5°	0.6	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)