

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: P1056487

Luminaire Tested: S125R3DR-S850D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056487
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-S850D940-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

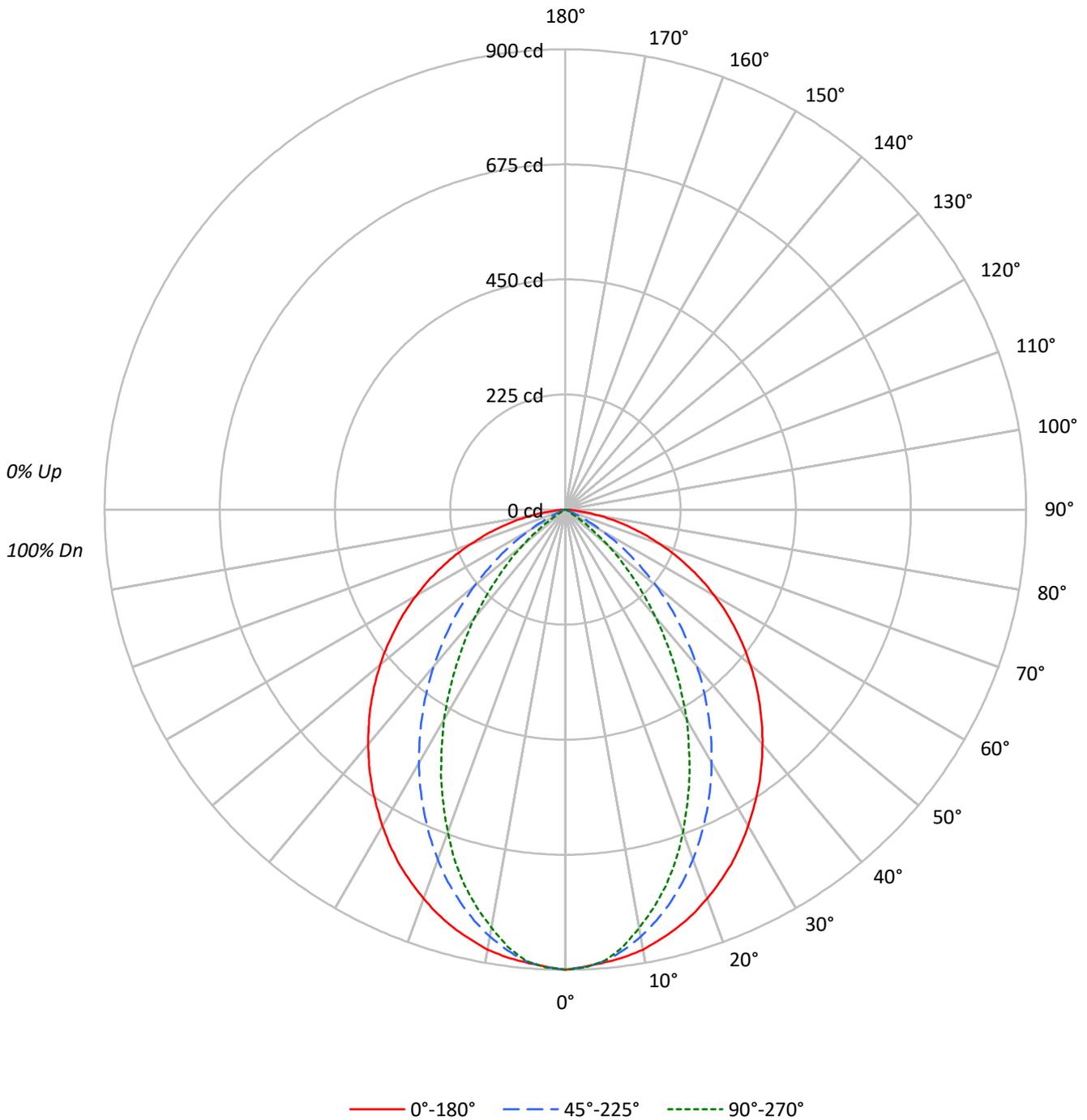
Lumens per Lamp: N/A
Luminaire Lumens: 1458.3 lumens
Efficiency: N/A
Efficacy: 55.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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°	6360	6360	6360
5°	6309	6290	6284
10°	6273	6087	5960
15°	6193	5815	5567
20°	6091	5481	5052
25°	5975	5091	4480
30°	5831	4666	3873
35°	5687	4194	3202
40°	5530	3687	2534
45°	5367	3147	1837
50°	5188	2541	1187
55°	4989	1857	528
60°	4753	1147	151
65°	4460	418	90
70°	4037	147	37
75°	3507	49	25
80°	2687	37	0
85°	1233	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5367 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	5.7
10°-20°	224.4	15.4
20°-30°	303.6	20.8
30°-40°	311.9	21.4
40°-50°	258.4	17.7
50°-60°	165.9	11.4
60°-70°	80.1	5.5
70°-80°	27.1	1.9
80°-90°	3.5	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°	611.5	41.9
0°-40°	923.4	63.3
0°-60°	1347.6	92.4
0°-90°	1458.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1458.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	889	896	886	881	886	84
15°	846	836	794	767	761	238
25°	766	728	653	594	574	352
35°	659	596	486	401	371	412
45°	537	448	315	218	184	414
55°	405	297	151	66	43	362
65°	267	147	25	7	5	264
75°	128	28	2	1	1	136
85°	15	0	0	0	0	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	899.7	899.7	899.7	899.7	899.7
2.5°	894.4	901.5	895.3	894.4	896.2
5°	889.0	896.2	886.4	881.0	885.5
7.5°	882.8	886.4	869.4	860.5	862.3
10°	873.9	873.0	848.0	832.9	830.2
12.5°	860.5	856.0	823.1	801.6	797.2
15°	846.2	835.5	794.5	766.9	760.6
17.5°	829.3	812.3	763.3	727.6	718.7
20°	809.7	786.5	728.5	684.8	671.5
22.5°	788.3	758.8	692.0	640.2	622.4
25°	766.0	728.5	652.7	593.9	574.3
27.5°	741.0	697.3	613.5	546.6	522.5
30°	714.3	664.3	571.6	498.5	474.4
32.5°	686.6	631.3	529.7	450.3	420.9
35°	659.0	595.7	486.0	401.3	371.0
37.5°	629.5	560.0	443.2	354.9	321.9
40°	599.2	523.4	399.5	306.7	274.6
42.5°	568.0	486.0	355.8	261.3	228.3
45°	536.8	448.5	314.8	217.6	183.7
47.5°	504.7	410.2	272.0	174.8	145.3
50°	471.7	372.7	231.0	136.4	107.9
52.5°	438.7	334.4	189.0	99.0	73.1
55°	404.8	296.9	150.7	66.0	42.8
57.5°	371.0	258.6	115.0	36.6	16.1
60°	336.2	222.0	81.1	12.5	10.7
62.5°	302.3	182.8	50.8	9.8	8.0
65°	266.6	147.1	25.0	7.1	5.4
67.5°	231.8	113.2	10.7	4.5	2.7
70°	195.3	82.0	7.1	2.7	1.8
72.5°	161.4	52.6	4.5	1.8	0.9
75°	128.4	27.6	1.8	0.9	0.9
77.5°	96.3	11.6	0.9	0.9	0.9
80°	66.0	5.4	0.9	0.9	0.0
82.5°	39.2	1.8	0.9	0.9	0.0
85°	15.2	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)