

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: P1056478

Luminaire Tested: S125R3DR-S850D927-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056478
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-S850D927-X4F0-XX-UDD-FLL-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

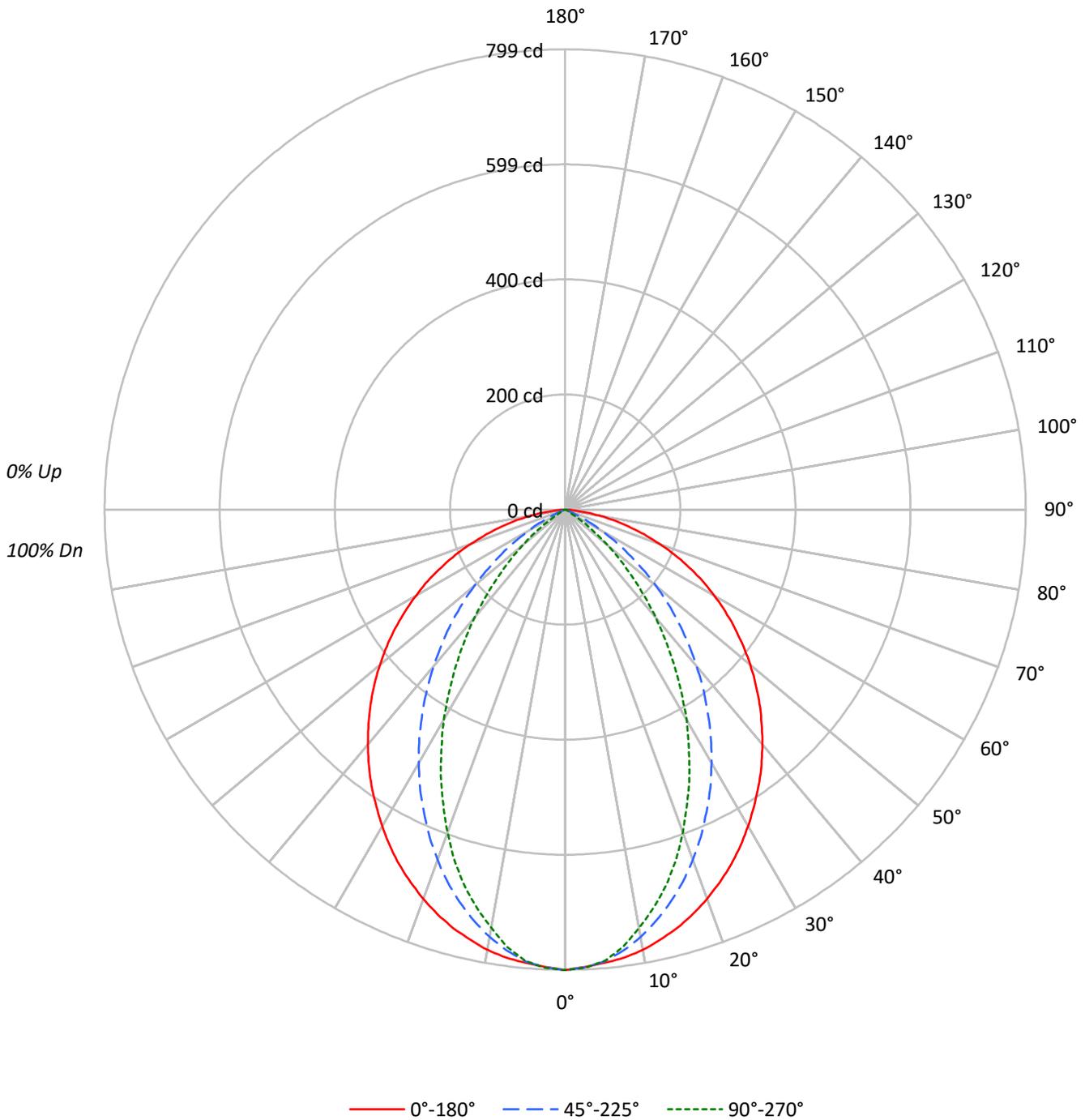
Lumens per Lamp: N/A
Luminaire Lumens: 1295.6 lumens
Efficiency: N/A
Efficacy: 49.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	5651	5651	5651
5°	5605	5588	5582
10°	5573	5408	5294
15°	5502	5166	4945
20°	5411	4869	4487
25°	5308	4523	3980
30°	5179	4145	3440
35°	5052	3726	2844
40°	4912	3275	2252
45°	4768	2795	1632
50°	4609	2257	1055
55°	4433	1650	468
60°	4223	1019	134
65°	3963	371	80
70°	3586	130	33
75°	3117	44	22
80°	2386	33	0
85°	1095	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4768 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	5.7
10°-20°	199.3	15.4
20°-30°	269.7	20.8
30°-40°	277.0	21.4
40°-50°	229.5	17.7
50°-60°	147.4	11.4
60°-70°	71.2	5.5
70°-80°	24.1	1.9
80°-90°	3.1	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°	543.3	41.9
0°-40°	820.3	63.3
0°-60°	1197.2	92.4
0°-90°	1295.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1295.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	790	796	787	783	787	75
15°	752	742	706	681	676	212
25°	680	647	580	528	510	313
35°	585	529	432	356	330	366
45°	477	398	280	193	163	368
55°	360	264	134	59	38	321
65°	237	131	22	6	5	234
75°	114	25	2	1	1	121
85°	14	0	0	0	0	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	799.3	799.3	799.3	799.3	799.3
2.5°	794.6	800.9	795.4	794.6	796.1
5°	789.8	796.1	787.4	782.7	786.6
7.5°	784.3	787.4	772.4	764.5	766.0
10°	776.3	775.5	753.4	739.9	737.5
12.5°	764.5	760.5	731.2	712.2	708.2
15°	751.8	742.3	705.8	681.3	675.7
17.5°	736.7	721.7	678.1	646.4	638.5
20°	719.3	698.7	647.2	608.4	596.5
22.5°	700.3	674.1	614.7	568.8	552.9
25°	680.5	647.2	579.9	527.6	510.2
27.5°	658.3	619.5	545.0	485.6	464.2
30°	634.5	590.2	507.8	442.8	421.4
32.5°	610.0	560.9	470.6	400.1	373.9
35°	585.4	529.2	431.7	356.5	329.5
37.5°	559.3	497.5	393.7	315.3	286.0
40°	532.3	465.0	354.9	272.5	244.0
42.5°	504.6	431.7	316.1	232.1	202.8
45°	476.9	398.5	279.6	193.3	163.2
47.5°	448.4	364.4	241.6	155.3	129.1
50°	419.1	331.1	205.2	121.2	95.9
52.5°	389.8	297.1	167.9	87.9	65.0
55°	359.7	263.8	133.9	58.6	38.0
57.5°	329.5	229.7	102.2	32.5	14.3
60°	298.7	197.3	72.1	11.1	9.5
62.5°	268.6	162.4	45.2	8.7	7.1
65°	236.9	130.7	22.2	6.3	4.8
67.5°	206.0	100.6	9.5	4.0	2.4
70°	173.5	72.9	6.3	2.4	1.6
72.5°	143.4	46.7	4.0	1.6	0.8
75°	114.1	24.6	1.6	0.8	0.8
77.5°	85.6	10.3	0.8	0.8	0.8
80°	58.6	4.8	0.8	0.8	0.0
82.5°	34.9	1.6	0.8	0.8	0.0
85°	13.5	0.0	0.0	0.0	0.0
87.5°	0.8	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)