

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: P1056038

Luminaire Tested: S124R3DR-S575D835-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056038  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124R3DR-S575D835-X4F0-XX-UDD-FLL-S  
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

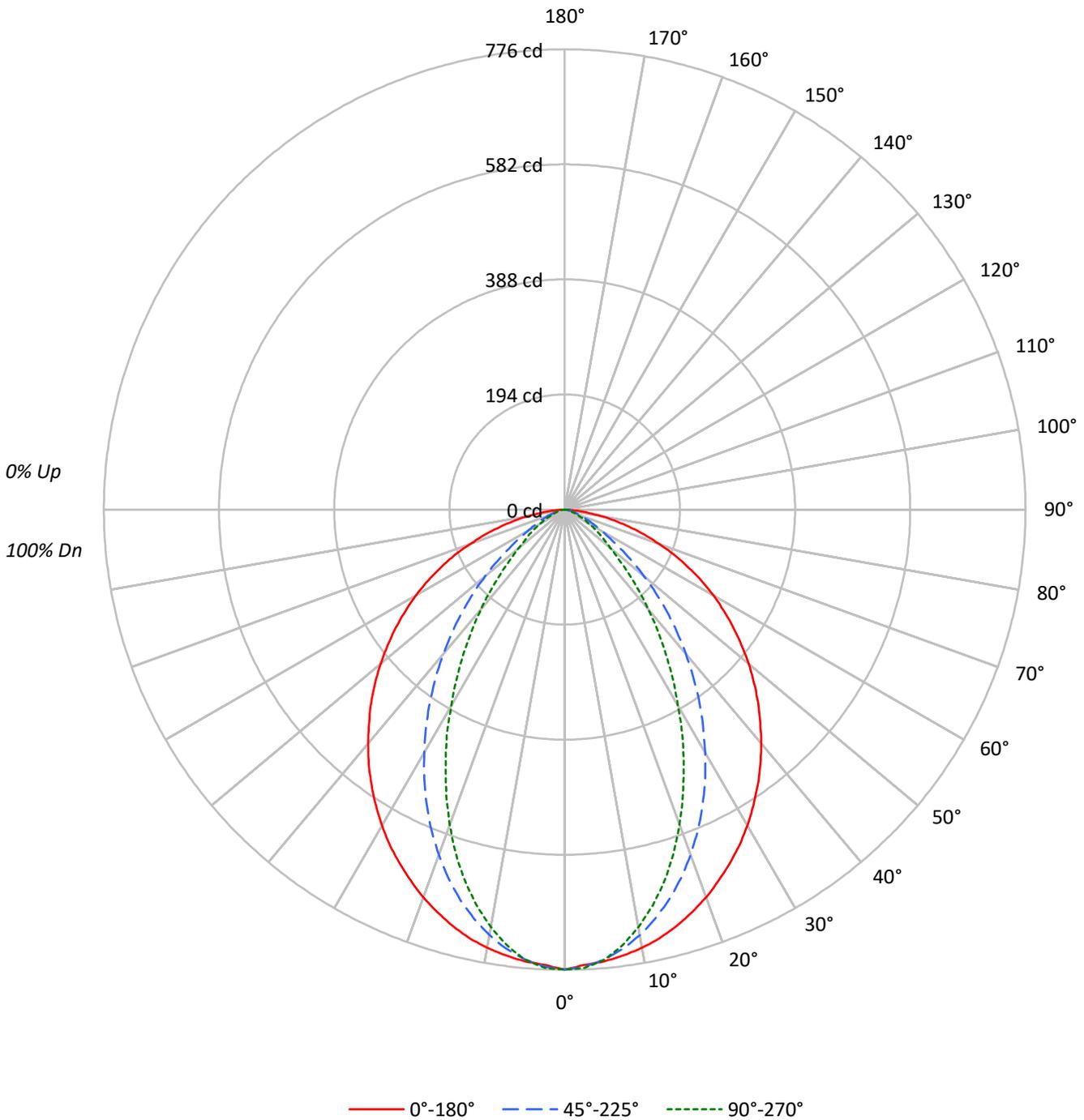
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1254.1 lumens  
Efficiency: N/A  
Efficacy: 65.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03  
Luminous Opening: Rectangular (W 0.31' 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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

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

	0°	45°	90°
0°	6857	6857	6857
5°	6787	6762	6762
10°	6736	6541	6418
15°	6656	6227	5936
20°	6549	5830	5320
25°	6418	5362	4621
30°	6282	4829	3893
35°	6119	4263	3203
40°	5943	3659	2525
45°	5760	3043	1887
50°	5562	2393	1381
55°	5343	1770	1102
60°	5109	1225	843
65°	4803	952	619
70°	4351	672	486
75°	3799	468	369
80°	3050	367	331
85°	1684	294	294

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5760 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.9	5.7
10°-20°	192.2	15.3
20°-30°	256.4	20.4
30°-40°	258.1	20.6
40°-50°	211.7	16.9
50°-60°	144.7	11.5
60°-70°	80.9	6.4
70°-80°	32.1	2.6
80°-90°	6.1	0.5
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°	520.5	41.5
0°-40°	778.7	62.1
0°-60°	1135.1	90.5
0°-90°	1254.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1254.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	776	776	776	776	776	
5°	765	773	762	758	762	73
15°	727	719	680	656	648	205
25°	658	625	550	494	474	303
35°	567	507	395	320	297	354
45°	461	376	243	171	151	355
55°	347	243	115	76	72	310
65°	230	116	46	32	30	227
75°	111	30	14	12	11	119
85°	17	3	3	3	3	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	775.6	775.6	775.6	775.6	775.6
2.5°	768.4	777.7	771.2	772.0	773.4
5°	764.7	773.4	761.9	758.3	761.9
7.5°	758.3	764.7	747.4	740.2	741.6
10°	750.3	752.5	728.6	716.4	714.9
12.5°	740.2	737.3	706.3	688.2	683.9
15°	727.2	719.3	680.3	656.4	648.5
17.5°	712.0	698.3	651.4	620.3	608.8
20°	696.1	675.9	619.6	579.9	565.4
22.5°	677.4	652.1	585.7	537.3	520.7
25°	657.9	625.4	549.6	493.9	473.7
27.5°	637.7	597.9	512.0	449.9	429.7
30°	615.3	568.3	473.0	405.8	381.3
32.5°	591.4	538.0	434.0	362.5	339.4
35°	566.9	506.9	395.0	319.9	296.8
37.5°	541.6	475.2	356.0	279.5	256.4
40°	514.9	442.7	317.0	241.2	218.8
42.5°	487.4	409.5	279.5	205.1	184.1
45°	460.7	376.2	243.4	171.1	150.9
47.5°	432.6	343.0	208.0	139.4	122.0
50°	404.4	309.8	174.0	111.9	100.4
52.5°	375.5	276.6	143.0	91.7	83.8
55°	346.6	243.4	114.8	76.5	71.5
57.5°	317.7	210.1	88.8	65.0	59.2
60°	288.9	177.6	69.3	52.7	47.7
62.5°	259.2	145.2	57.0	41.9	37.6
65°	229.6	115.5	45.5	32.5	29.6
67.5°	200.0	88.1	34.7	25.3	23.1
70°	168.3	62.8	26.0	19.5	18.8
72.5°	140.8	42.6	18.8	15.2	14.4
75°	111.2	30.3	13.7	11.6	10.8
77.5°	85.9	19.5	10.1	9.4	8.7
80°	59.9	10.8	7.2	6.5	6.5
82.5°	36.8	5.8	5.1	4.3	4.3
85°	16.6	2.9	2.9	2.9	2.9
87.5°	2.9	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)