

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: P1056047

Luminaire Tested: S124R3DR-S575D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056047  
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-S575D927-X4F0-XX-UDD-FLL-S  
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

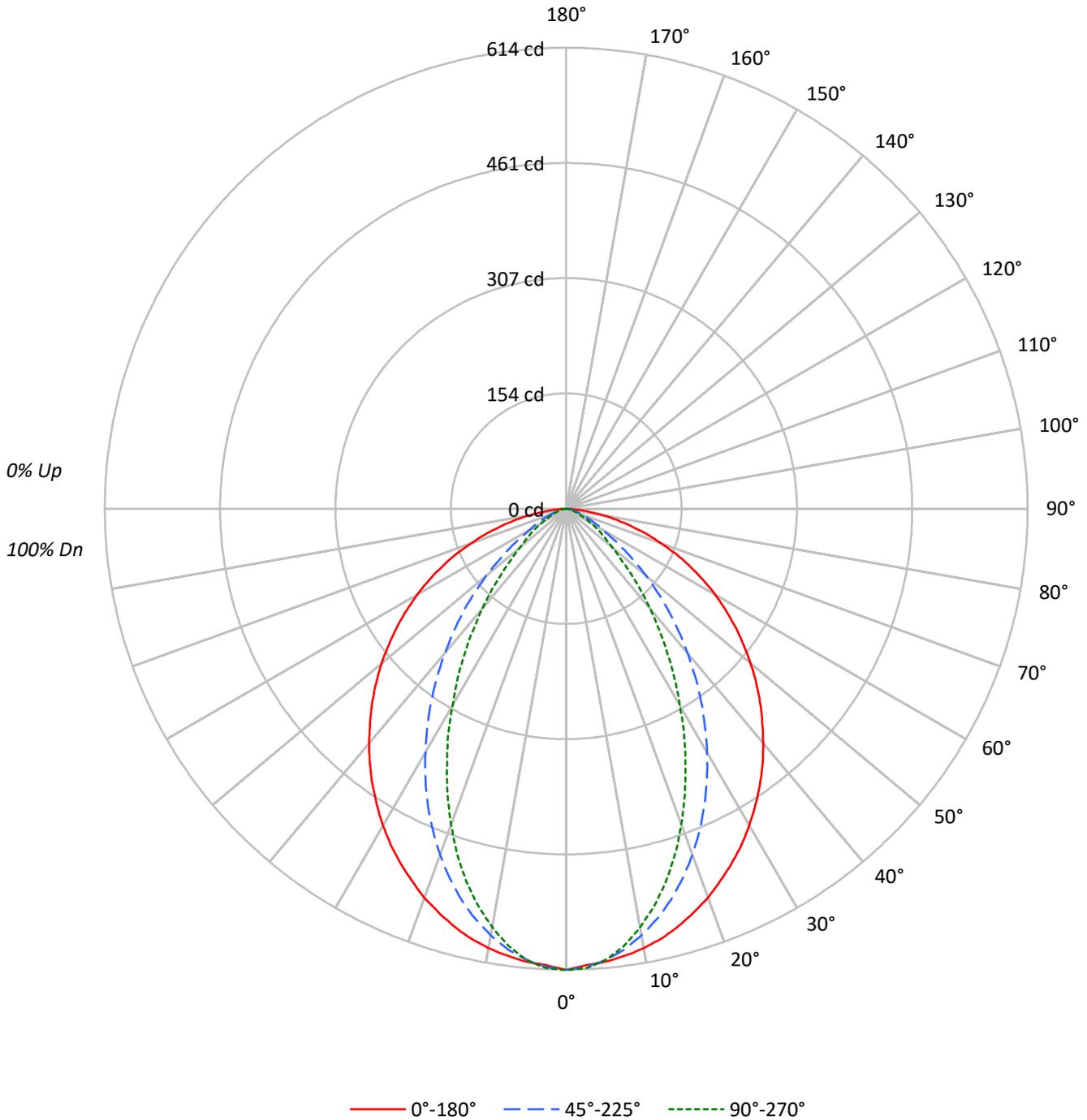
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 993.5 lumens  
Efficiency: N/A  
Efficacy: 52.0 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

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

	0°	45°	90°
0°	5432	5432	5432
5°	5377	5356	5356
10°	5336	5182	5084
15°	5273	4933	4702
20°	5189	4618	4214
25°	5085	4247	3661
30°	4976	3825	3084
35°	4847	3377	2538
40°	4708	2898	2000
45°	4564	2411	1495
50°	4407	1897	1094
55°	4233	1403	872
60°	4046	971	668
65°	3805	753	492
70°	3446	533	385
75°	3010	372	294
80°	2418	290	260
85°	1339	233	233

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4564 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	5.7
10°-20°	152.3	15.3
20°-30°	203.1	20.4
30°-40°	204.5	20.6
40°-50°	167.7	16.9
50°-60°	114.6	11.5
60°-70°	64.1	6.4
70°-80°	25.4	2.6
80°-90°	4.8	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°	412.4	41.5
0°-40°	616.9	62.1
0°-60°	899.2	90.5
0°-90°	993.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	993.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	606	613	604	601	604	57
15°	576	570	539	520	514	162
25°	521	495	435	391	375	240
35°	449	402	313	253	235	281
45°	365	298	193	136	120	281
55°	275	193	91	61	57	246
65°	182	92	36	26	24	180
75°	88	24	11	9	9	94
85°	13	2	2	2	2	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	614.4	614.4	614.4	614.4	614.4
2.5°	608.7	616.1	611.0	611.5	612.7
5°	605.8	612.7	603.5	600.7	603.5
7.5°	600.7	605.8	592.1	586.4	587.5
10°	594.4	596.1	577.2	567.5	566.3
12.5°	586.4	584.1	559.5	545.2	541.7
15°	576.1	569.8	538.9	520.0	513.7
17.5°	564.1	553.2	516.0	491.4	482.3
20°	551.5	535.5	490.8	459.4	447.9
22.5°	536.6	516.6	463.9	425.6	412.5
25°	521.2	495.4	435.3	391.3	375.3
27.5°	505.1	473.7	405.6	356.4	340.4
30°	487.4	450.2	374.7	321.5	302.1
32.5°	468.5	426.2	343.8	287.2	268.9
35°	449.1	401.6	312.9	253.4	235.1
37.5°	429.1	376.4	282.0	221.4	203.1
40°	407.9	350.7	251.1	191.1	173.3
42.5°	386.1	324.4	221.4	162.5	145.9
45°	365.0	298.0	192.8	135.6	119.6
47.5°	342.7	271.7	164.8	110.4	96.7
50°	320.4	245.4	137.9	88.7	79.5
52.5°	297.5	219.1	113.3	72.7	66.4
55°	274.6	192.8	91.0	60.6	56.6
57.5°	251.7	166.5	70.4	51.5	46.9
60°	228.8	140.7	54.9	41.8	37.8
62.5°	205.4	115.0	45.2	33.2	29.7
65°	181.9	91.5	36.0	25.7	23.5
67.5°	158.5	69.8	27.5	20.0	18.3
70°	133.3	49.8	20.6	15.4	14.9
72.5°	111.6	33.8	14.9	12.0	11.4
75°	88.1	24.0	10.9	9.2	8.6
77.5°	68.1	15.4	8.0	7.4	6.9
80°	47.5	8.6	5.7	5.1	5.1
82.5°	29.2	4.6	4.0	3.4	3.4
85°	13.2	2.3	2.3	2.3	2.3
87.5°	2.3	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)