

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: P1056055

Luminaire Tested: S124R3DR-S575D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S575D940-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

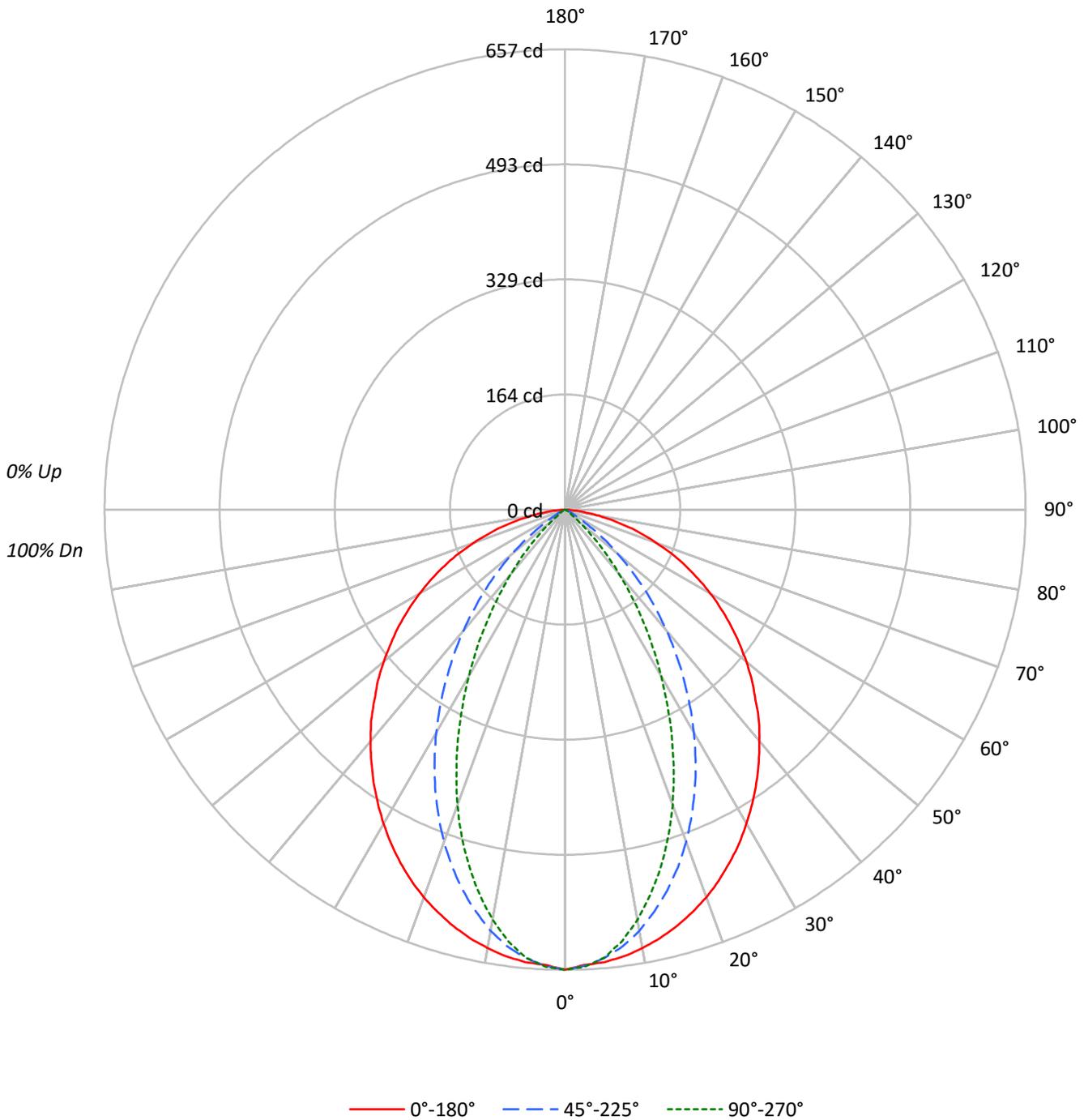
Lumens per Lamp: N/A
Luminaire Lumens: 918.0 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64	
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52	
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47			47	
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			43	
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40			40	
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5807	5807	5807
5°	5755	5704	5698
10°	5706	5481	5336
15°	5635	5151	4833
20°	5544	4751	4223
25°	5421	4278	3525
30°	5285	3754	2800
35°	5137	3183	2085
40°	4979	2593	1390
45°	4806	1981	765
50°	4641	1355	213
55°	4456	735	139
60°	4235	228	80
65°	3960	149	40
70°	3578	67	16
75°	3081	20	0
80°	2327	0	0
85°	984	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4806 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	6.6
10°-20°	159.1	17.3
20°-30°	205.6	22.4
30°-40°	196.5	21.4
40°-50°	146.9	16.0
50°-60°	87.4	9.5
60°-70°	44.4	4.8
70°-80°	15.4	1.7
80°-90°	2.1	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°	425.2	46.3
0°-40°	621.7	67.7
0°-60°	856.1	93.3
0°-90°	918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	918.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	657	657	657	657	657	
5°	648	654	643	639	642	61
15°	616	603	563	536	528	173
25°	556	517	438	381	361	256
35°	476	410	295	220	193	298
45°	384	295	158	84	61	297
55°	289	180	48	11	9	258
65°	189	73	7	3	2	187
75°	90	10	1	1	0	96
85°	10	0	0	0	0	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	656.8	656.8	656.8	656.8	656.8
2.5°	650.4	658.1	651.7	652.3	653.0
5°	648.4	653.6	642.7	639.4	642.0
7.5°	643.3	645.2	629.1	620.8	621.4
10°	635.6	633.6	610.5	596.3	594.4
12.5°	626.6	620.1	587.9	567.3	562.8
15°	615.6	602.7	562.8	536.4	528.0
17.5°	602.7	584.1	535.1	500.3	490.0
20°	589.2	563.4	504.9	461.7	448.8
22.5°	573.1	540.3	472.0	421.1	405.0
25°	555.7	517.1	438.5	380.6	361.3
27.5°	537.7	492.0	403.1	339.4	316.8
30°	517.7	465.6	367.7	297.5	274.3
32.5°	497.1	438.5	331.0	258.9	233.1
35°	475.9	410.2	294.9	219.6	193.2
37.5°	454.0	381.9	260.2	182.2	155.2
40°	431.4	352.9	224.7	146.8	120.4
42.5°	409.5	323.9	191.3	113.3	88.9
45°	384.4	294.9	158.4	84.4	61.2
47.5°	361.9	266.6	126.9	57.3	36.1
50°	337.4	236.3	98.5	33.5	15.5
52.5°	313.0	208.0	72.1	14.8	11.6
55°	289.1	179.7	47.7	10.9	9.0
57.5°	264.0	151.3	25.8	8.4	6.4
60°	239.5	123.6	12.9	6.4	4.5
62.5°	214.4	97.2	10.3	3.9	2.6
65°	189.3	72.8	7.1	2.6	1.9
67.5°	164.2	49.6	4.5	1.3	0.6
70°	138.4	30.3	2.6	0.6	0.6
72.5°	114.0	15.5	1.3	0.6	0.6
75°	90.2	9.7	0.6	0.6	0.0
77.5°	67.0	5.2	0.6	0.6	0.0
80°	45.7	1.9	0.0	0.0	0.0
82.5°	26.4	0.6	0.0	0.0	0.0
85°	9.7	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)