

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: P1056043

Luminaire Tested: S124R3DR-S575D850-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056043
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-S575D850-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

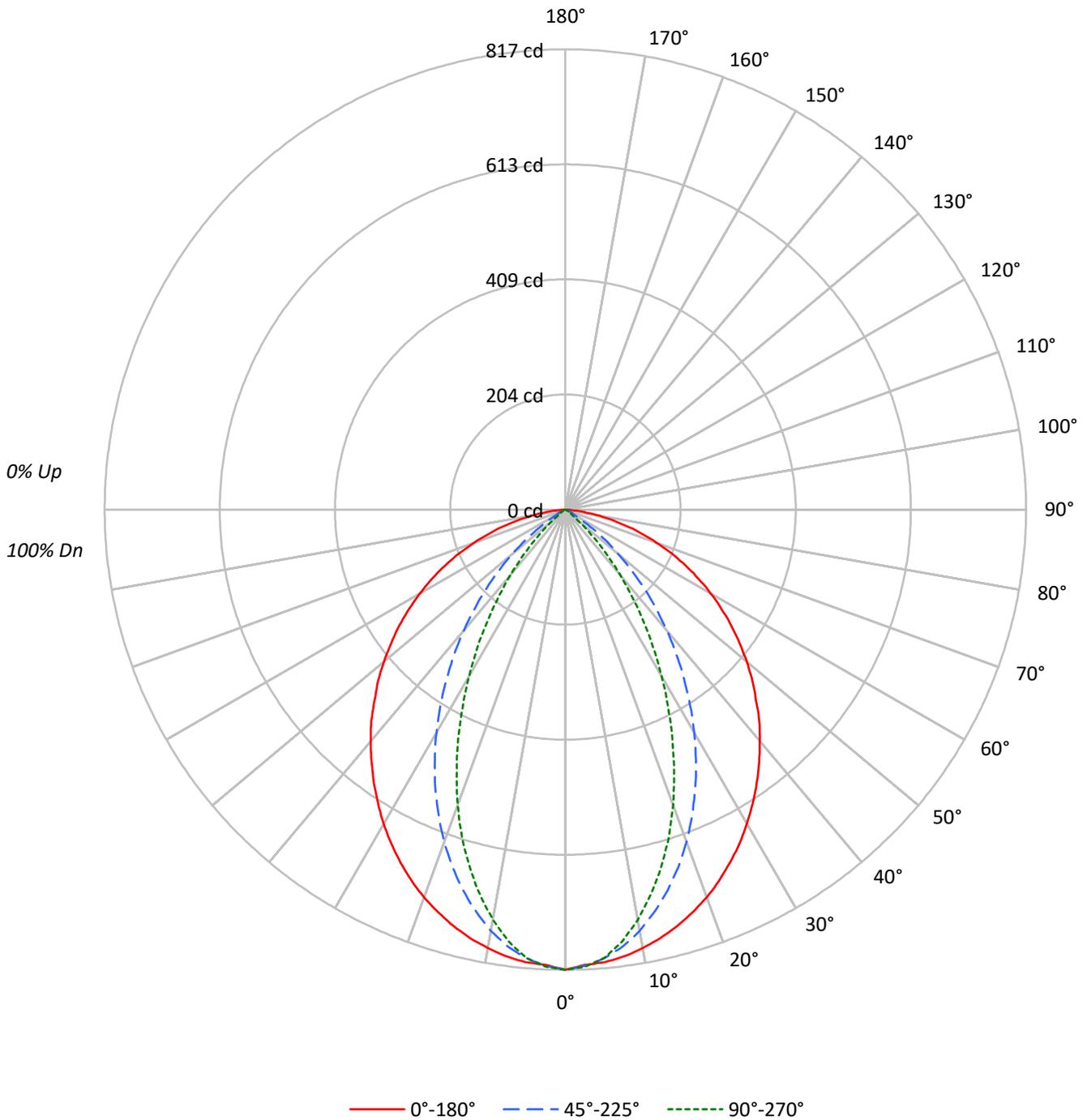
Lumens per Lamp: N/A
Luminaire Lumens: 1141.7 lumens
Efficiency: N/A
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64				
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52				
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47				
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43				
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40				
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7223	7223	7223
5°	7158	7094	7087
10°	7096	6816	6636
15°	7008	6406	6011
20°	6895	5908	5252
25°	6742	5321	4383
30°	6574	4669	3483
35°	6387	3959	2594
40°	6193	3226	1729
45°	5978	2463	952
50°	5771	1685	264
55°	5543	914	173
60°	5268	283	99
65°	4927	184	50
70°	4451	83	21
75°	3829	27	0
80°	2897	0	0
85°	1217	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5978 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	6.6
10°-20°	197.8	17.3
20°-30°	255.7	22.4
30°-40°	244.3	21.4
40°-50°	182.7	16.0
50°-60°	108.7	9.5
60°-70°	55.2	4.8
70°-80°	19.2	1.7
80°-90°	2.6	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°	528.8	46.3
0°-40°	773.2	67.7
0°-60°	1064.7	93.3
0°-90°	1141.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1141.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	817	817	817	817	817	
5°	806	813	799	795	798	76
15°	766	750	700	667	657	216
25°	691	643	545	473	449	318
35°	592	510	367	273	240	370
45°	478	367	197	105	76	370
55°	360	223	59	14	11	321
65°	236	90	9	3	2	233
75°	112	12	1	1	0	119
85°	12	0	0	0	0	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.9	816.9	816.9	816.9	816.9
2.5°	808.9	818.5	810.5	811.3	812.1
5°	806.5	812.9	799.3	795.3	798.5
7.5°	800.1	802.5	782.4	772.0	772.8
10°	790.4	788.0	759.2	741.6	739.2
12.5°	779.2	771.2	731.2	705.6	699.9
15°	765.6	749.6	699.9	667.1	656.7
17.5°	749.6	726.4	665.5	622.3	609.5
20°	732.8	700.7	627.9	574.2	558.2
22.5°	712.8	671.9	587.0	523.8	503.7
25°	691.1	643.1	545.4	473.3	449.3
27.5°	668.7	611.9	501.3	422.1	394.0
30°	643.9	579.0	457.3	370.0	341.2
32.5°	618.3	545.4	411.6	321.9	289.9
35°	591.8	510.1	366.8	273.1	240.3
37.5°	564.6	474.9	323.5	226.6	193.0
40°	536.6	438.9	279.5	182.6	149.8
42.5°	509.3	402.8	237.9	141.0	110.5
45°	478.1	366.8	197.0	104.9	76.1
47.5°	450.1	331.6	157.8	71.3	44.8
50°	419.6	293.9	122.5	41.6	19.2
52.5°	389.2	258.7	89.7	18.4	14.4
55°	359.6	223.4	59.3	13.6	11.2
57.5°	328.4	188.2	32.0	10.4	8.0
60°	297.9	153.8	16.0	8.0	5.6
62.5°	266.7	120.9	12.8	4.8	3.2
65°	235.5	90.5	8.8	3.2	2.4
67.5°	204.2	61.7	5.6	1.6	0.8
70°	172.2	37.6	3.2	0.8	0.8
72.5°	141.8	19.2	1.6	0.8	0.8
75°	112.1	12.0	0.8	0.8	0.0
77.5°	83.3	6.4	0.8	0.8	0.0
80°	56.9	2.4	0.0	0.0	0.0
82.5°	32.8	0.8	0.0	0.0	0.0
85°	12.0	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)