

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: P1056079

Luminaire Tested: S124R3DR-S795D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056079
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-S795D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

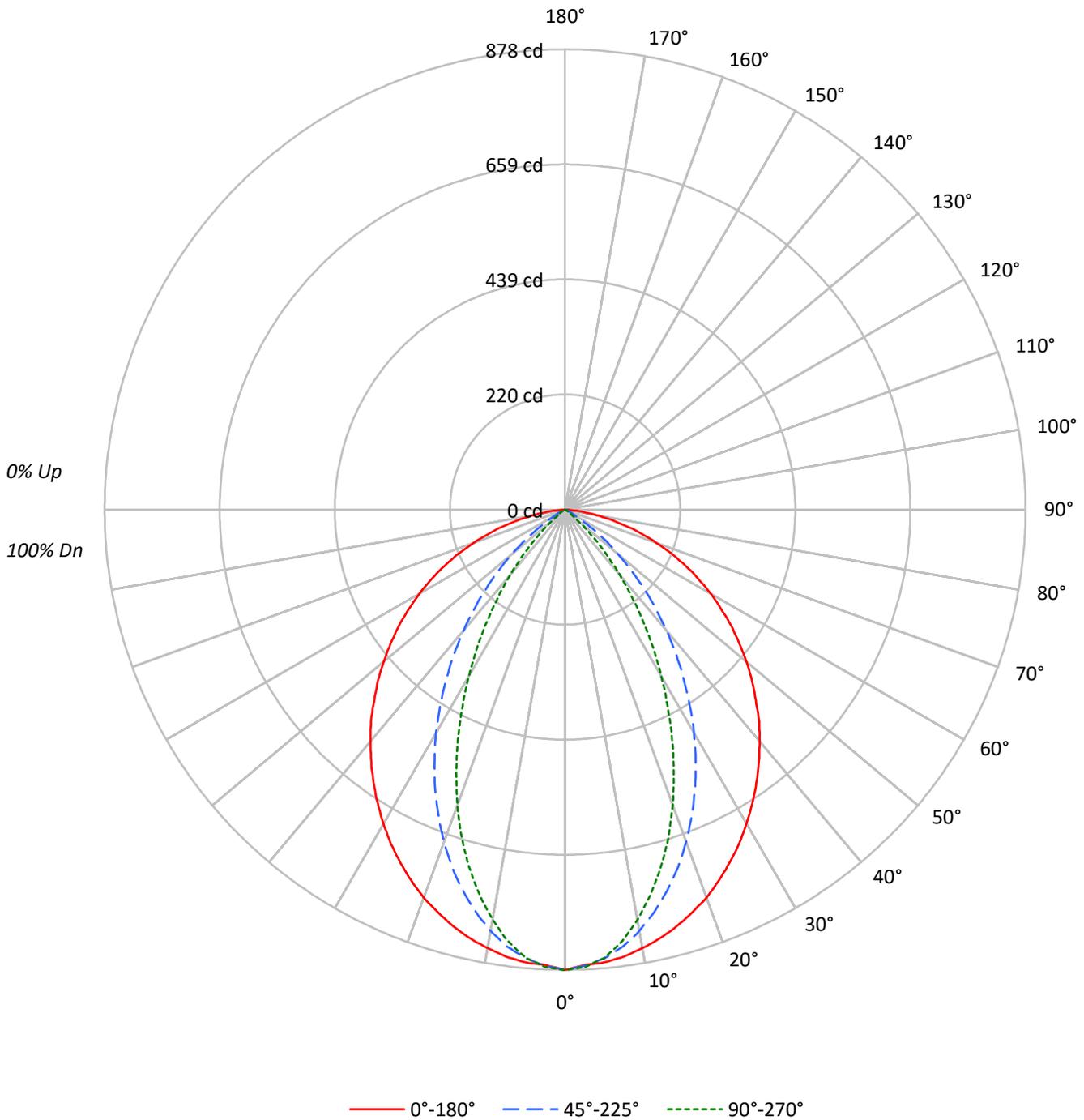
Lumens per Lamp: N/A
Luminaire Lumens: 1227.5 lumens
Efficiency: N/A
Efficacy: 46.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	7764	7764	7764
5°	7695	7626	7618
10°	7629	7328	7135
15°	7534	6888	6462
20°	7412	6351	5646
25°	7248	5720	4712
30°	7067	5019	3745
35°	6868	4256	2788
40°	6658	3468	1858
45°	6427	2648	1023
50°	6206	1811	285
55°	5959	982	187
60°	5664	304	106
65°	5295	199	54
70°	4785	88	23
75°	4116	31	0
80°	3111	0	0
85°	1309	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6427 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	6.6
10°-20°	212.7	17.3
20°-30°	274.8	22.4
30°-40°	262.7	21.4
40°-50°	196.5	16.0
50°-60°	116.9	9.5
60°-70°	59.4	4.8
70°-80°	20.7	1.7
80°-90°	2.8	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°	568.6	46.3
0°-40°	831.3	67.7
0°-60°	1144.6	93.3
0°-90°	1227.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1227.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	867	874	859	855	858	82
15°	823	806	752	717	706	232
25°	743	691	586	509	483	342
35°	636	548	394	294	258	398
45°	514	394	212	113	82	397
55°	387	240	64	15	12	345
65°	253	97	10	3	3	250
75°	120	13	1	1	0	128
85°	13	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°	878.2	878.2	878.2	878.2	878.2
2.5°	869.6	879.9	871.3	872.2	873.1
5°	867.0	873.9	859.3	855.0	858.4
7.5°	860.1	862.7	841.2	830.0	830.9
10°	849.8	847.2	816.2	797.3	794.7
12.5°	837.8	829.1	786.1	758.5	752.5
15°	823.1	805.9	752.5	717.2	706.0
17.5°	805.9	780.9	715.5	669.0	655.2
20°	787.8	753.4	675.0	617.3	600.1
22.5°	766.3	722.4	631.1	563.1	541.6
25°	743.0	691.4	586.3	508.8	483.0
27.5°	718.9	657.8	539.0	453.7	423.6
30°	692.2	622.5	491.6	397.8	366.8
32.5°	664.7	586.3	442.6	346.1	311.7
35°	636.3	548.5	394.3	293.6	258.3
37.5°	607.0	510.6	347.8	243.7	207.5
40°	576.9	471.8	300.5	196.3	161.0
42.5°	547.6	433.1	255.7	151.5	118.8
45°	514.0	394.3	211.8	112.8	81.8
47.5°	483.9	356.5	169.6	76.6	48.2
50°	451.2	316.0	131.7	44.8	20.7
52.5°	418.4	278.1	96.4	19.8	15.5
55°	386.6	240.2	63.7	14.6	12.1
57.5°	353.0	202.3	34.4	11.2	8.6
60°	320.3	165.3	17.2	8.6	6.0
62.5°	286.7	130.0	13.8	5.2	3.4
65°	253.1	97.3	9.5	3.4	2.6
67.5°	219.6	66.3	6.0	1.7	0.9
70°	185.1	40.5	3.4	0.9	0.9
72.5°	152.4	20.7	1.7	0.9	0.9
75°	120.5	12.9	0.9	0.9	0.0
77.5°	89.5	6.9	0.9	0.9	0.0
80°	61.1	2.6	0.0	0.0	0.0
82.5°	35.3	0.9	0.0	0.0	0.0
85°	12.9	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)