

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: P1056076

Luminaire Tested: S124R3DR-S795D930-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056076
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-S795D930-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

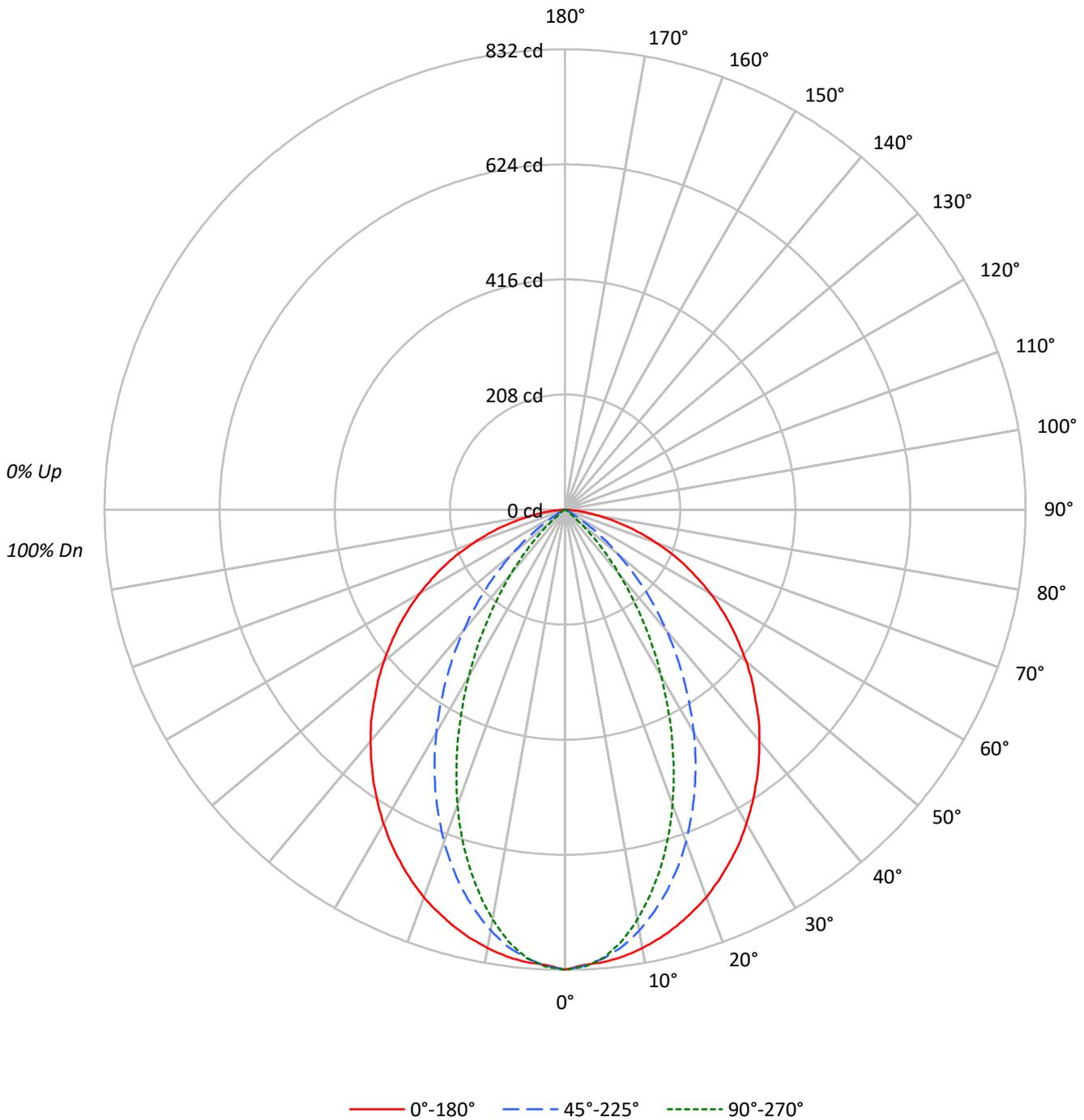
Lumens per Lamp: N/A
Luminaire Lumens: 1162.3 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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°	7352	7352	7352
5°	7286	7222	7215
10°	7224	6939	6756
15°	7134	6523	6119
20°	7019	6014	5347
25°	6864	5416	4462
30°	6692	4752	3546
35°	6503	4030	2640
40°	6304	3284	1760
45°	6085	2508	969
50°	5876	1715	270
55°	5643	929	176
60°	5363	288	101
65°	5015	188	50
70°	4532	85	21
75°	3898	27	0
80°	2948	0	0
85°	1238	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	6.6
10°-20°	201.4	17.3
20°-30°	260.3	22.4
30°-40°	248.7	21.4
40°-50°	186.0	16.0
50°-60°	110.7	9.5
60°-70°	56.2	4.8
70°-80°	19.5	1.7
80°-90°	2.7	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°	538.4	46.3
0°-40°	787.1	67.7
0°-60°	1083.9	93.3
0°-90°	1162.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1162.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	821	828	814	810	813	78
15°	779	763	713	679	668	220
25°	704	655	555	482	457	324
35°	602	519	373	278	245	377
45°	487	373	201	107	78	376
55°	366	228	60	14	11	327
65°	240	92	9	3	2	237
75°	114	12	1	1	0	121
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°	831.6	831.6	831.6	831.6	831.6
2.5°	823.5	833.2	825.1	825.9	826.7
5°	821.0	827.5	813.7	809.6	812.9
7.5°	814.5	816.9	796.5	785.9	786.8
10°	804.7	802.3	772.9	755.0	752.5
12.5°	793.3	785.1	744.4	718.3	712.6
15°	779.4	763.1	712.6	679.1	668.5
17.5°	763.1	739.5	677.5	633.5	620.4
20°	746.0	713.4	639.2	584.6	568.3
22.5°	725.6	684.0	597.6	533.2	512.8
25°	703.6	654.7	555.2	481.8	457.4
27.5°	680.8	622.9	510.4	429.7	401.1
30°	655.5	589.5	465.5	376.7	347.3
32.5°	629.4	555.2	419.1	327.7	295.1
35°	602.5	519.3	373.4	278.0	244.6
37.5°	574.8	483.5	329.4	230.7	196.5
40°	546.2	446.8	284.5	185.9	152.5
42.5°	518.5	410.1	242.1	143.5	112.5
45°	486.7	373.4	200.6	106.8	77.5
47.5°	458.2	337.5	160.6	72.6	45.7
50°	427.2	299.2	124.7	42.4	19.6
52.5°	396.2	263.3	91.3	18.8	14.7
55°	366.1	227.5	60.3	13.9	11.4
57.5°	334.3	191.6	32.6	10.6	8.2
60°	303.3	156.5	16.3	8.2	5.7
62.5°	271.5	123.1	13.0	4.9	3.3
65°	239.7	92.1	9.0	3.3	2.4
67.5°	207.9	62.8	5.7	1.6	0.8
70°	175.3	38.3	3.3	0.8	0.8
72.5°	144.3	19.6	1.6	0.8	0.8
75°	114.1	12.2	0.8	0.8	0.0
77.5°	84.8	6.5	0.8	0.8	0.0
80°	57.9	2.4	0.0	0.0	0.0
82.5°	33.4	0.8	0.0	0.0	0.0
85°	12.2	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)