

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: P1056063

Luminaire Tested: S124R3DR-S795D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

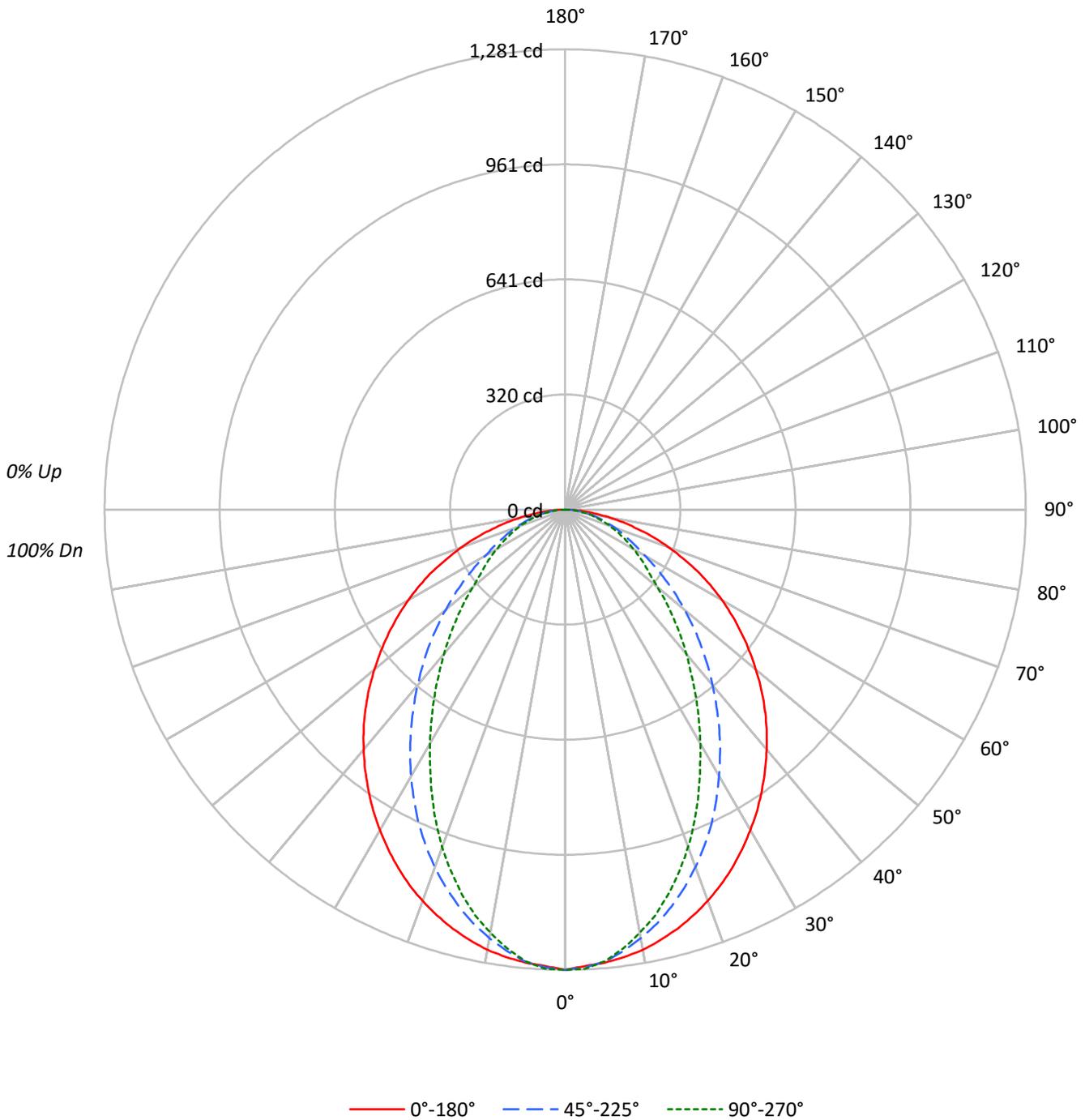
Lumens per Lamp: N/A
Luminaire Lumens: 2551.2 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86				
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73				
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63				
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35				
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11325	11325	11325
5°	11234	11209	11201
10°	11170	10874	10738
15°	11052	10465	10145
20°	10908	9968	9409
25°	10730	9397	8552
30°	10517	8747	7679
35°	10296	8067	6836
40°	10063	7365	6049
45°	9817	6682	5315
50°	9516	5964	4590
55°	9226	5246	4170
60°	8900	4500	3867
65°	8498	4082	3609
70°	7895	3777	3412
75°	7146	3478	3221
80°	6237	3218	3024
85°	4778	2962	2769

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	4.7
10°-20°	323.5	12.7
20°-30°	447.9	17.6
30°-40°	480.7	18.8
40°-50°	437.2	17.1
50°-60°	344.3	13.5
60°-70°	235.6	9.2
70°-80°	126.8	5.0
80°-90°	35.9	1.4
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°	890.6	34.9
0°-40°	1371.4	53.8
0°-60°	2152.9	84.4
0°-90°	2551.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2551.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1266	1280	1263	1256	1262	120
15°	1207	1194	1143	1112	1108	340
25°	1100	1055	963	894	877	506
35°	954	879	747	657	633	597
45°	785	685	534	442	425	605
55°	598	484	340	274	270	535
65°	406	290	195	173	172	401
75°	209	127	102	93	94	223
85°	47	32	29	27	27	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.9	1280.9	1280.9	1280.9	1280.9
2.5°	1271.5	1286.6	1275.3	1277.1	1279.0
5°	1265.8	1280.0	1263.0	1256.4	1262.1
7.5°	1256.4	1265.8	1239.4	1227.2	1232.8
10°	1244.2	1246.0	1211.2	1193.3	1196.1
12.5°	1227.2	1222.5	1180.1	1154.6	1156.5
15°	1207.4	1194.2	1143.3	1112.2	1108.4
17.5°	1184.8	1163.1	1102.8	1063.2	1055.6
20°	1159.3	1130.1	1059.4	1008.5	1000.0
22.5°	1131.1	1093.4	1012.3	952.0	939.7
25°	1099.9	1054.7	963.3	893.5	876.6
27.5°	1066.0	1013.2	910.5	834.2	812.5
30°	1030.2	969.9	856.8	774.8	752.2
32.5°	993.4	925.6	802.1	715.4	691.8
35°	953.9	879.4	747.4	657.0	633.4
37.5°	913.3	831.3	691.8	600.4	575.9
40°	871.9	783.3	638.1	543.8	524.1
42.5°	829.4	734.2	585.3	491.1	473.2
45°	785.1	685.2	534.4	442.1	425.1
47.5°	739.9	635.3	482.6	395.9	379.8
50°	691.8	585.3	433.6	350.6	333.7
52.5°	645.6	534.4	386.4	306.3	297.8
55°	598.5	484.5	340.3	274.3	270.5
57.5°	551.4	434.5	297.8	248.8	245.1
60°	503.3	385.5	254.5	222.4	218.7
62.5°	455.2	337.4	222.4	197.0	195.1
65°	406.2	290.3	195.1	173.4	172.5
67.5°	354.4	245.1	170.6	152.7	151.7
70°	305.4	199.8	146.1	132.0	132.0
72.5°	259.2	158.3	123.5	112.2	112.2
75°	209.2	127.2	101.8	93.3	94.3
77.5°	164.9	99.9	82.0	76.3	76.3
80°	122.5	74.5	63.2	58.4	59.4
82.5°	82.9	51.8	45.2	42.4	42.4
85°	47.1	32.0	29.2	27.3	27.3
87.5°	17.0	15.1	14.1	12.3	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)