

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: P1056087

Luminaire Tested: S124R3DR-S795D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056087  
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-S795D950-X4F0-XX-UDD-FLL-W  
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

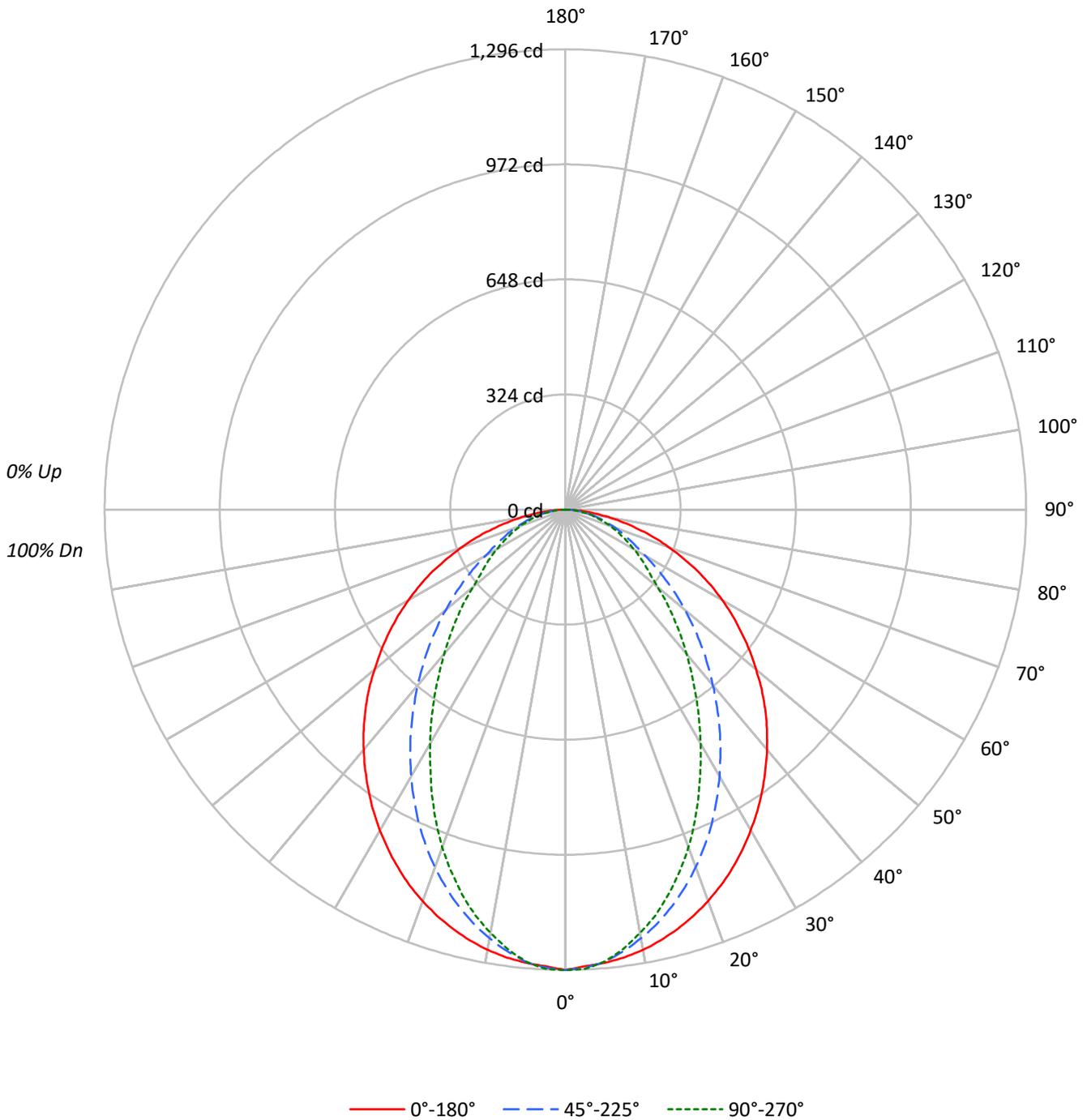
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2582.3 lumens  
Efficiency: N/A  
Efficacy: 97.8 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

TEST NUMBER: P1056087

CATALOG NUMBER: S124R3DR-S795D950-X4F0-XX-UDD-FLL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1056087

CATALOG NUMBER: S124R3DR-S795D950-X4F0-XX-UDD-FLL-W

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11463	11463	11463
5°	11371	11346	11337
10°	11306	11006	10868
15°	11186	10592	10269
20°	11040	10089	9524
25°	10861	9511	8655
30°	10645	8853	7772
35°	10420	8165	6920
40°	10185	7455	6122
45°	9937	6763	5380
50°	9631	6036	4645
55°	9338	5309	4220
60°	9008	4555	3913
65°	8603	4132	3653
70°	7990	3823	3454
75°	7235	3519	3259
80°	6314	3253	3060
85°	4839	3003	2810

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9937 cd/sqm



TEST NUMBER: P1056087

CATALOG NUMBER: S124R3DR-S795D950-X4F0-XX-UDD-FLL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.7	4.7
10°-20°	327.4	12.7
20°-30°	453.3	17.6
30°-40°	486.6	18.8
40°-50°	442.5	17.1
50°-60°	348.5	13.5
60°-70°	238.5	9.2
70°-80°	128.4	5.0
80°-90°	36.4	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°	901.5	34.9
0°-40°	1388.1	53.8
0°-60°	2179.0	84.4
0°-90°	2582.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2582.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1281	1296	1278	1272	1277	122
15°	1222	1209	1157	1126	1122	345
25°	1113	1068	975	904	887	513
35°	965	890	756	665	641	604
45°	795	694	541	447	430	613
55°	606	490	344	278	274	542
65°	411	294	198	176	175	406
75°	212	129	103	94	95	226
85°	48	32	30	28	28	57
90°	0	0	0	0	0	



TEST NUMBER: P1056087

CATALOG NUMBER: S124R3DR-S795D950-X4F0-XX-UDD-FLL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1296.5	1296.5	1296.5	1296.5	1296.5
2.5°	1286.9	1302.2	1290.8	1292.7	1294.6
5°	1281.2	1295.5	1278.4	1271.7	1277.4
7.5°	1271.7	1281.2	1254.5	1242.1	1247.8
10°	1259.3	1261.2	1225.9	1207.8	1210.6
12.5°	1242.1	1237.3	1194.4	1168.7	1170.6
15°	1222.1	1208.7	1157.2	1125.7	1121.9
17.5°	1199.2	1177.2	1116.2	1076.1	1068.5
20°	1173.4	1143.8	1072.3	1020.8	1012.2
22.5°	1144.8	1106.6	1024.6	963.5	951.1
25°	1113.3	1067.5	975.0	904.4	887.2
27.5°	1079.0	1025.6	921.6	844.3	822.3
30°	1042.7	981.7	867.2	784.2	761.3
32.5°	1005.5	936.8	811.9	724.1	700.2
35°	965.4	890.1	756.5	664.9	641.1
37.5°	924.4	841.4	700.2	607.7	582.9
40°	882.5	792.8	645.9	550.5	530.4
42.5°	839.5	743.2	592.4	497.0	478.9
45°	794.7	693.6	540.9	447.4	430.3
47.5°	748.9	643.0	488.4	400.7	384.5
50°	700.2	592.4	438.8	354.9	337.7
52.5°	653.5	540.9	391.1	310.1	301.5
55°	605.8	490.4	344.4	277.6	273.8
57.5°	558.1	439.8	301.5	251.9	248.0
60°	509.4	390.2	257.6	225.1	221.3
62.5°	460.8	341.5	225.1	199.4	197.5
65°	411.2	293.8	197.5	175.5	174.6
67.5°	358.7	248.0	172.7	154.5	153.6
70°	309.1	202.2	147.9	133.6	133.6
72.5°	262.4	160.3	125.0	113.5	113.5
75°	211.8	128.8	103.0	94.4	95.4
77.5°	167.0	101.1	83.0	77.3	77.3
80°	124.0	75.4	63.9	59.1	60.1
82.5°	84.0	52.5	45.8	42.9	42.9
85°	47.7	32.4	29.6	27.7	27.7
87.5°	17.2	15.3	14.3	12.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)