

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: P1056071

Luminaire Tested: S124R3DR-S795D850-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S795D850-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

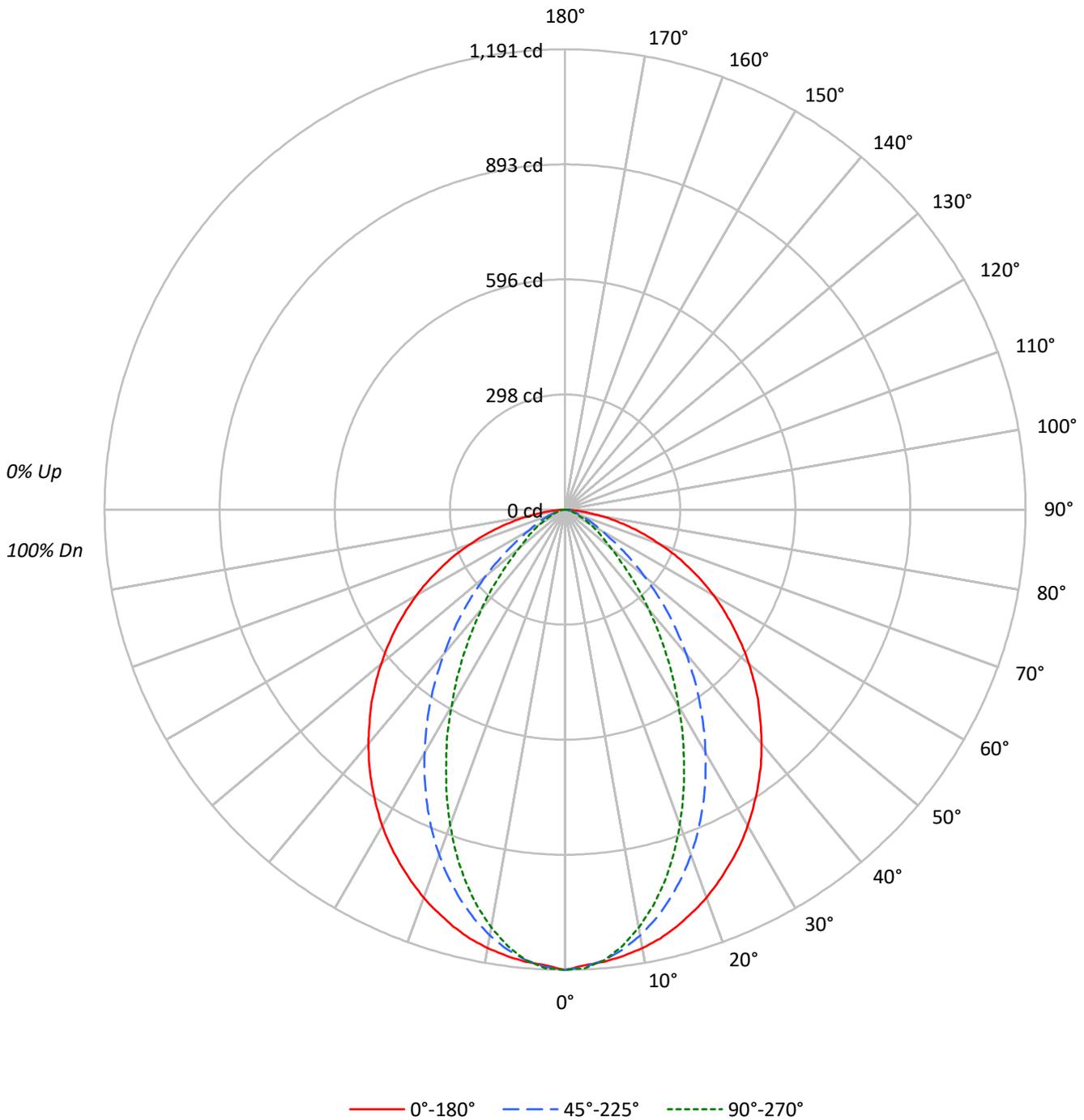
Lumens per Lamp: N/A
Luminaire Lumens: 1925.9 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10531	10531	10531
5°	10423	10384	10384
10°	10345	10046	9857
15°	10222	9562	9116
20°	10059	8952	8170
25°	9856	8233	7097
30°	9647	7416	5978
35°	9397	6547	4920
40°	9126	5620	3878
45°	8846	4673	2898
50°	8542	3677	2121
55°	8205	2718	1693
60°	7844	1883	1294
65°	7379	1462	952
70°	6680	1031	744
75°	5835	721	567
80°	4684	565	509
85°	2587	446	446

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8846 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	5.7
10°-20°	295.2	15.3
20°-30°	393.7	20.4
30°-40°	396.4	20.6
40°-50°	325.1	16.9
50°-60°	222.2	11.5
60°-70°	124.2	6.4
70°-80°	49.2	2.6
80°-90°	9.3	0.5
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°	799.4	41.5
0°-40°	1195.8	62.1
0°-60°	1743.1	90.5
0°-90°	1925.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1191	1191	1191	1191	1191	
5°	1174	1188	1170	1164	1170	111
15°	1117	1105	1045	1008	996	315
25°	1010	960	844	759	728	465
35°	871	778	607	491	456	544
45°	708	578	374	263	232	545
55°	532	374	176	118	110	476
65°	353	177	70	50	46	348
75°	171	47	21	18	17	183
85°	26	4	4	4	4	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1191.1	1191.1	1191.1	1191.1	1191.1
2.5°	1180.0	1194.4	1184.4	1185.5	1187.7
5°	1174.4	1187.7	1170.0	1164.5	1170.0
7.5°	1164.5	1174.4	1147.8	1136.7	1138.9
10°	1152.3	1155.6	1119.0	1100.1	1097.9
12.5°	1136.7	1132.3	1084.6	1056.9	1050.2
15°	1116.8	1104.6	1044.7	1008.1	995.9
17.5°	1093.5	1072.4	1000.3	952.6	934.9
20°	1069.1	1038.0	951.5	890.5	868.3
22.5°	1040.2	1001.4	899.4	825.1	799.6
25°	1010.3	960.4	843.9	758.6	727.5
27.5°	979.2	918.3	786.3	690.9	659.9
30°	944.9	872.8	726.4	623.3	585.6
32.5°	908.3	826.2	666.5	556.7	521.2
35°	870.6	778.5	606.6	491.3	455.8
37.5°	831.8	729.7	546.7	429.2	393.7
40°	790.7	679.8	486.9	370.4	336.0
42.5°	748.6	628.8	429.2	315.0	282.8
45°	707.5	577.8	373.7	262.8	231.8
47.5°	664.3	526.8	319.4	214.0	187.4
50°	621.0	475.8	267.3	171.9	154.2
52.5°	576.7	424.7	219.6	140.8	128.6
55°	532.3	373.7	176.3	117.6	109.8
57.5°	488.0	322.7	136.4	99.8	90.9
60°	443.6	272.8	106.5	81.0	73.2
62.5°	398.1	222.9	87.6	64.3	57.7
65°	352.7	177.4	69.9	49.9	45.5
67.5°	307.2	135.3	53.2	38.8	35.5
70°	258.4	96.5	39.9	29.9	28.8
72.5°	216.3	65.4	28.8	23.3	22.2
75°	170.8	46.6	21.1	17.7	16.6
77.5°	132.0	29.9	15.5	14.4	13.3
80°	92.0	16.6	11.1	10.0	10.0
82.5°	56.6	8.9	7.8	6.7	6.7
85°	25.5	4.4	4.4	4.4	4.4
87.5°	4.4	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)