

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: P1056085

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056085
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-S795D950-X4F0-XX-UDD-FLL-B
Description: DEFINE 4, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

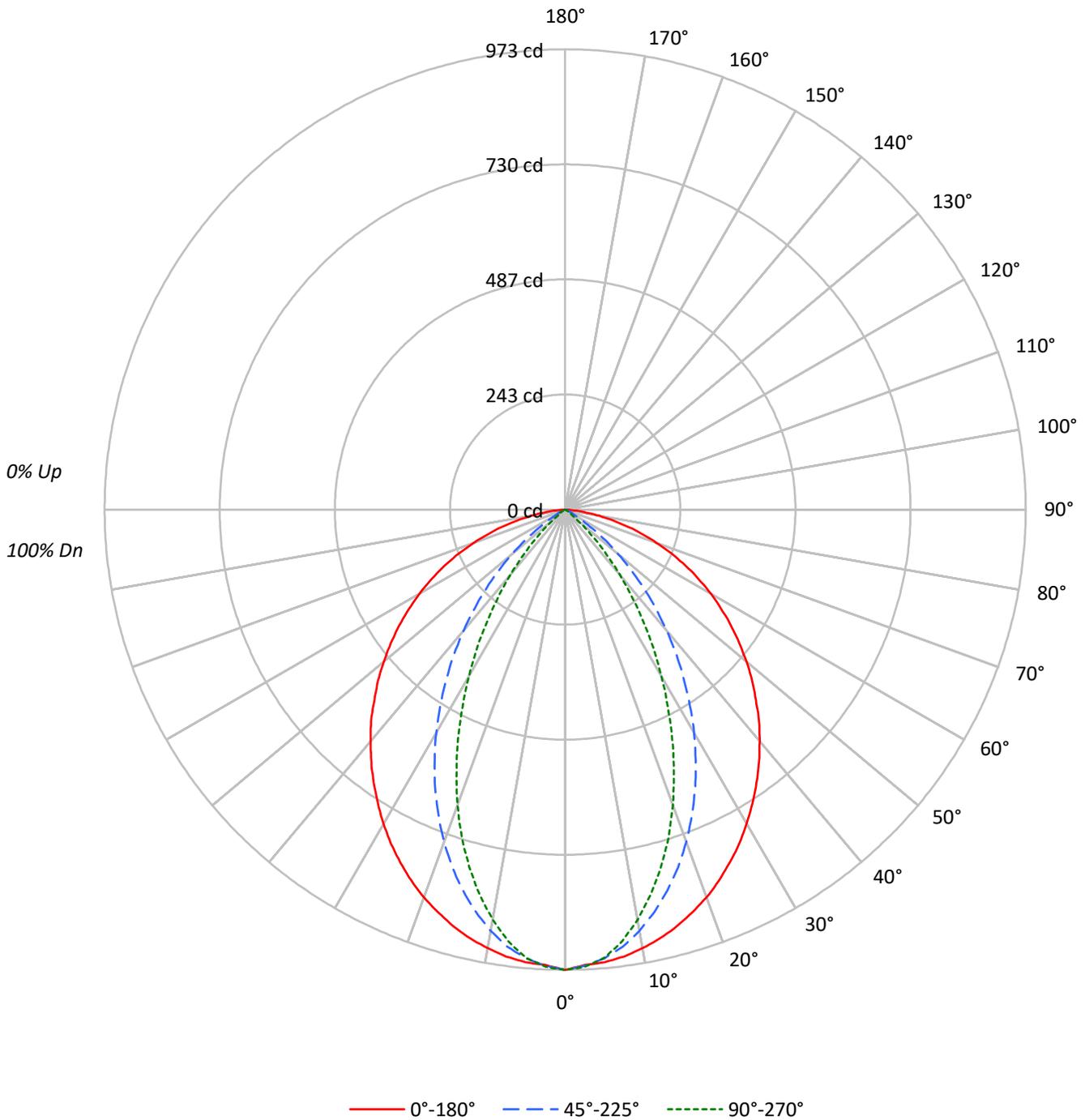
Lumens per Lamp: N/A
Luminaire Lumens: 1360.1 lumens
Efficiency: N/A
Efficacy: 51.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64			64	
5	84	74	66	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57			57	
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52			52	
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47			47	
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			43	
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40			40	
10	62	50	43	39	61	50	43	39	49	43	39	48	42	39	47	42	38	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8604	8604	8604
5°	8526	8450	8441
10°	8453	8119	7905
15°	8348	7632	7161
20°	8213	7037	6256
25°	8032	6338	5221
30°	7830	5561	4149
35°	7609	4716	3089
40°	7377	3842	2059
45°	7121	2935	1133
50°	6876	2008	315
55°	6602	1088	207
60°	6276	338	118
65°	5868	220	61
70°	5302	98	26
75°	4564	34	0
80°	3447	0	0
85°	1451	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7121 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	6.6
10°-20°	235.7	17.3
20°-30°	304.5	22.4
30°-40°	291.1	21.4
40°-50°	217.7	16.0
50°-60°	129.5	9.5
60°-70°	65.8	4.8
70°-80°	22.9	1.7
80°-90°	3.1	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°	630.0	46.3
0°-40°	921.0	67.7
0°-60°	1268.3	93.3
0°-90°	1360.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1360.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	961	968	952	947	951	91
15°	912	893	834	795	782	257
25°	823	766	650	564	535	379
35°	705	608	437	325	286	441
45°	570	437	235	125	91	440
55°	428	266	71	16	13	382
65°	280	108	10	4	3	277
75°	134	14	1	1	0	142
85°	14	0	0	0	0	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.1	973.1	973.1	973.1	973.1
2.5°	963.5	975.0	965.4	966.4	967.4
5°	960.7	968.3	952.1	947.3	951.1
7.5°	953.0	955.9	932.1	919.7	920.6
10°	941.6	938.7	904.4	883.4	880.5
12.5°	928.2	918.7	871.0	840.5	833.8
15°	912.0	892.9	833.8	794.7	782.3
17.5°	892.9	865.3	792.8	741.3	726.0
20°	872.9	834.7	747.9	684.0	664.9
22.5°	849.1	800.4	699.3	623.9	600.1
25°	823.3	766.1	649.7	563.8	535.2
27.5°	796.6	728.9	597.2	502.8	469.4
30°	767.0	689.7	544.7	440.7	406.4
32.5°	736.5	649.7	490.4	383.5	345.3
35°	705.0	607.7	436.9	325.3	286.2
37.5°	672.6	565.7	385.4	270.0	229.9
40°	639.2	522.8	332.9	217.5	178.4
42.5°	606.7	479.9	283.3	167.9	131.7
45°	569.5	436.9	234.7	125.0	90.6
47.5°	536.1	395.0	187.9	84.9	53.4
50°	499.9	350.1	146.0	49.6	22.9
52.5°	463.6	308.1	106.8	21.9	17.2
55°	428.3	266.2	70.6	16.2	13.4
57.5°	391.1	224.2	38.2	12.4	9.5
60°	354.9	183.2	19.1	9.5	6.7
62.5°	317.7	144.1	15.3	5.7	3.8
65°	280.5	107.8	10.5	3.8	2.9
67.5°	243.3	73.5	6.7	1.9	1.0
70°	205.1	44.8	3.8	1.0	1.0
72.5°	168.9	22.9	1.9	1.0	1.0
75°	133.6	14.3	1.0	1.0	0.0
77.5°	99.2	7.6	1.0	1.0	0.0
80°	67.7	2.9	0.0	0.0	0.0
82.5°	39.1	1.0	0.0	0.0	0.0
85°	14.3	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)