

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: P1055966

Luminaire Tested: S124R3DR-S1020D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055966
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-S1020D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 4, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

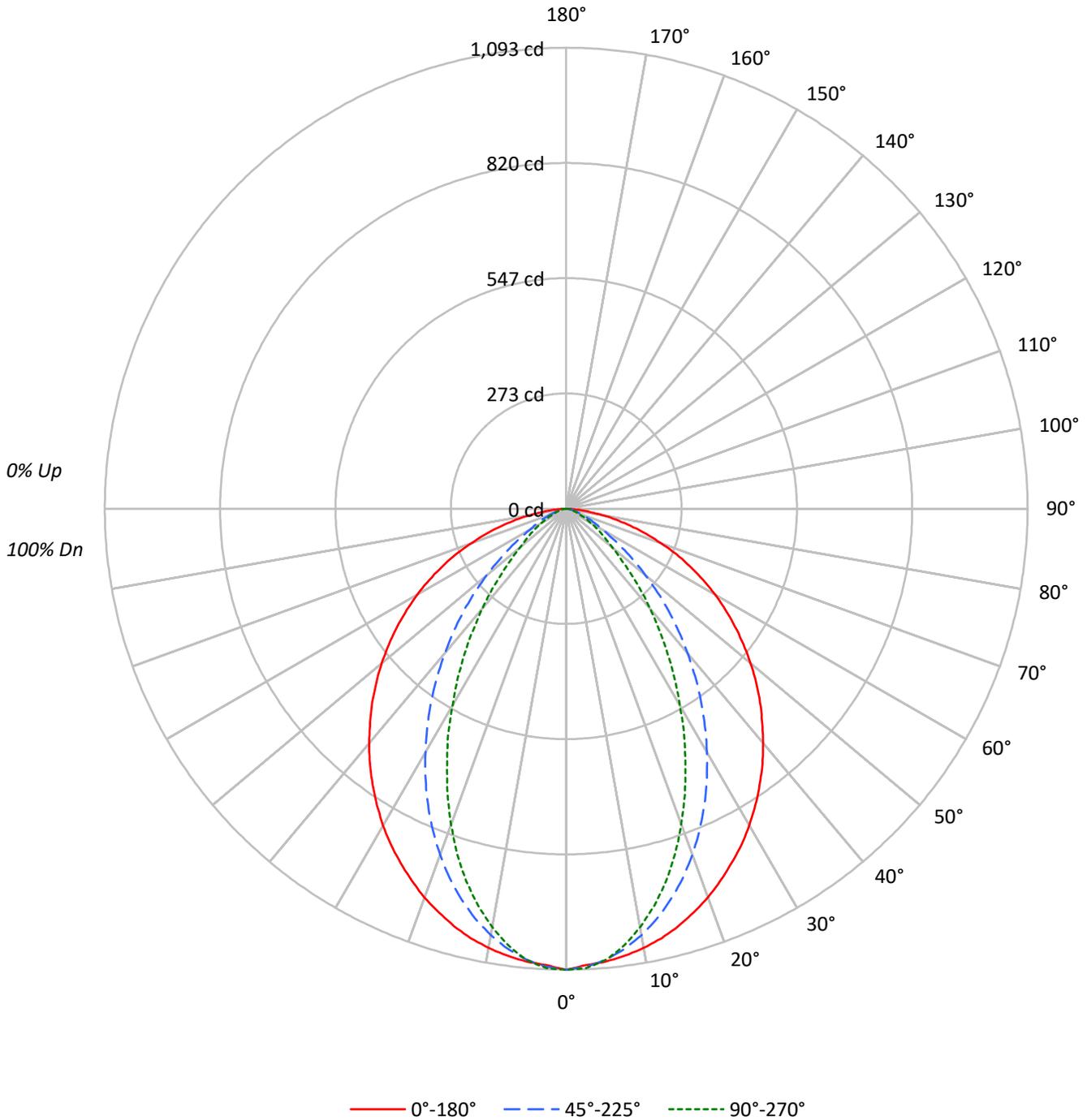
Lumens per Lamp: N/A
Luminaire Lumens: 1767.9 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78				78
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60				60
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48				48
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9666	9666	9666
5°	9568	9532	9532
10°	9496	9222	9048
15°	9383	8778	8368
20°	9234	8218	7500
25°	9047	7557	6515
30°	8854	6807	5487
35°	8625	6010	4516
40°	8377	5158	3561
45°	8121	4290	2661
50°	7842	3374	1946
55°	7532	2496	1554
60°	7200	1728	1188
65°	6772	1341	872
70°	6132	946	685
75°	5356	659	523
80°	4302	519	468
85°	2374	416	416

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8121 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.4	5.7
10°-20°	271.0	15.3
20°-30°	361.4	20.4
30°-40°	363.9	20.6
40°-50°	298.4	16.9
50°-60°	204.0	11.5
60°-70°	114.0	6.4
70°-80°	45.2	2.6
80°-90°	8.6	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°	733.8	41.5
0°-40°	1097.7	62.1
0°-60°	1600.1	90.5
0°-90°	1767.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1767.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1078	1090	1074	1069	1074	102
15°	1025	1014	959	925	914	289
25°	927	882	775	696	668	427
35°	799	715	557	451	418	500
45°	650	530	343	241	213	501
55°	489	343	162	108	101	437
65°	324	163	64	46	42	320
75°	157	43	19	16	15	168
85°	23	4	4	4	4	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.3	1093.3	1093.3	1093.3	1093.3
2.5°	1083.2	1096.4	1087.2	1088.2	1090.3
5°	1078.1	1090.3	1074.0	1068.9	1074.0
7.5°	1068.9	1078.1	1053.6	1043.5	1045.5
10°	1057.7	1060.8	1027.2	1009.9	1007.8
12.5°	1043.5	1039.4	995.6	970.2	964.0
15°	1025.1	1013.9	959.0	925.4	914.2
17.5°	1003.8	984.4	918.2	874.5	858.2
20°	981.4	952.9	873.4	817.5	797.1
22.5°	954.9	919.3	825.6	757.4	734.0
25°	927.4	881.6	774.7	696.3	667.8
27.5°	898.9	842.9	721.8	634.2	605.7
30°	867.3	801.2	666.8	572.1	537.5
32.5°	833.7	758.4	611.8	511.0	478.5
35°	799.1	714.6	556.8	451.0	418.4
37.5°	763.5	669.8	501.9	394.0	361.4
40°	725.8	624.0	446.9	340.0	308.5
42.5°	687.2	577.2	394.0	289.1	259.6
45°	649.5	530.4	343.1	241.3	212.8
47.5°	609.8	483.6	293.2	196.5	172.0
50°	570.1	436.7	245.3	157.8	141.5
52.5°	529.4	389.9	201.6	129.3	118.1
55°	488.6	343.1	161.9	107.9	100.8
57.5°	447.9	296.2	125.2	91.6	83.5
60°	407.2	250.4	97.7	74.3	67.2
62.5°	365.5	204.6	80.4	59.0	52.9
65°	323.7	162.9	64.1	45.8	41.7
67.5°	282.0	124.2	48.9	35.6	32.6
70°	237.2	88.6	36.6	27.5	26.5
72.5°	198.5	60.1	26.5	21.4	20.4
75°	156.8	42.8	19.3	16.3	15.3
77.5°	121.1	27.5	14.3	13.2	12.2
80°	84.5	15.3	10.2	9.2	9.2
82.5°	51.9	8.1	7.1	6.1	6.1
85°	23.4	4.1	4.1	4.1	4.1
87.5°	4.1	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)