

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: P1055978

Luminaire Tested: S124R3DR-S1020D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055978
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-S1020D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

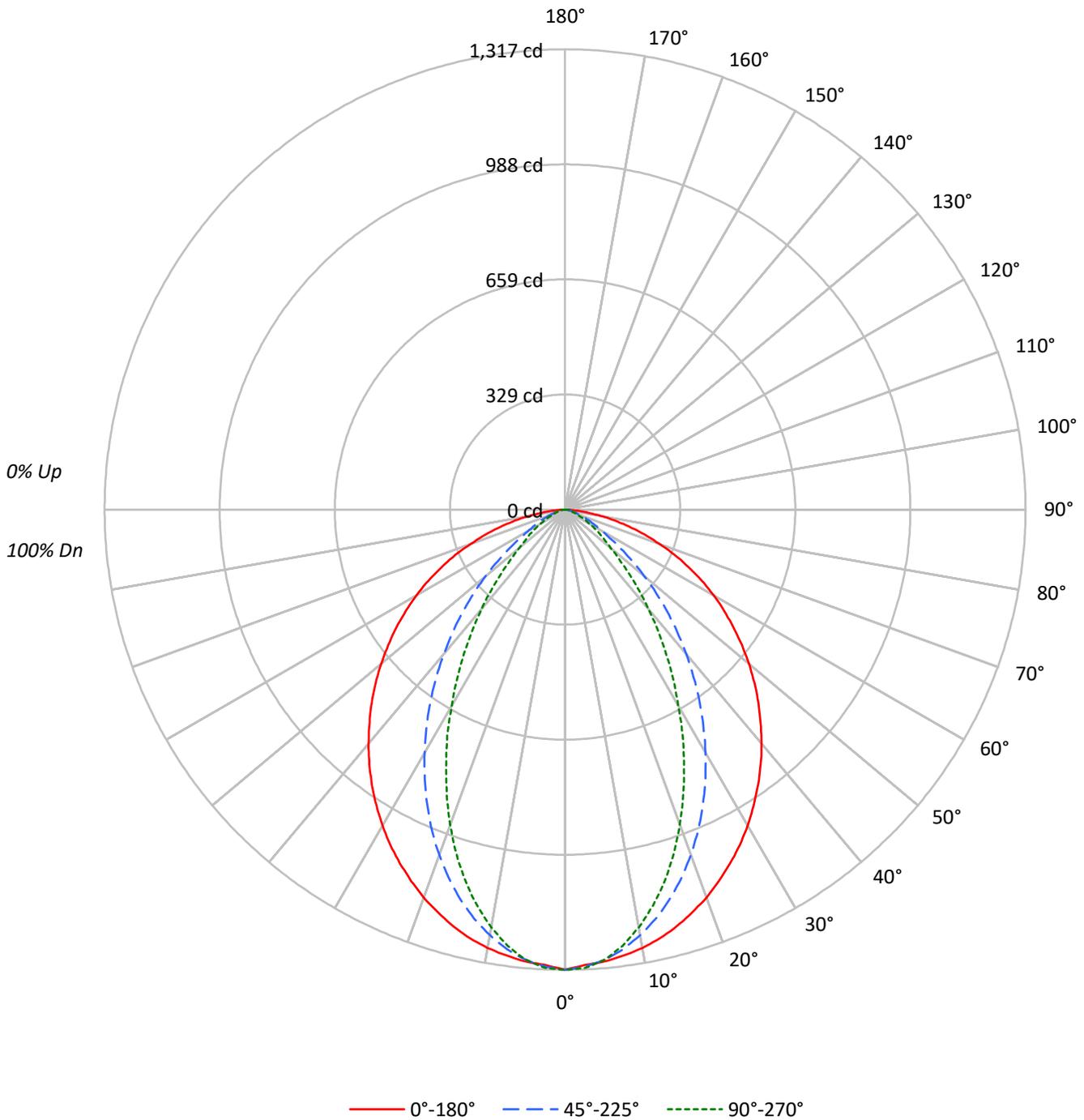
Lumens per Lamp: N/A
Luminaire Lumens: 2129.0 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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	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°	11641	11641	11641
5°	11523	11479	11479
10°	11436	11106	10896
15°	11300	10570	10077
20°	11119	9897	9032
25°	10895	9101	7845
30°	10663	8198	6608
35°	10387	7238	5439
40°	10089	6212	4288
45°	9780	5165	3203
50°	9443	4065	2344
55°	9071	3004	1871
60°	8672	2081	1431
65°	8157	1615	1052
70°	7383	1140	825
75°	6449	796	629
80°	5183	626	560
85°	2861	497	497

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.1	5.7
10°-20°	326.3	15.3
20°-30°	435.2	20.4
30°-40°	438.2	20.6
40°-50°	359.4	16.9
50°-60°	245.7	11.5
60°-70°	137.3	6.4
70°-80°	54.4	2.6
80°-90°	10.3	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°	883.7	41.5
0°-40°	1321.9	62.1
0°-60°	1927.0	90.5
0°-90°	2129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1298	1313	1293	1287	1293	123
15°	1234	1221	1155	1114	1101	348
25°	1117	1062	933	839	804	515
35°	962	861	671	543	504	602
45°	782	639	413	291	256	603
55°	588	413	195	130	121	526
65°	390	196	77	55	50	385
75°	189	52	23	20	18	202
85°	28	5	5	5	5	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.7	1316.7	1316.7	1316.7	1316.7
2.5°	1304.4	1320.4	1309.3	1310.5	1313.0
5°	1298.3	1313.0	1293.4	1287.2	1293.4
7.5°	1287.2	1298.3	1268.9	1256.6	1259.1
10°	1273.8	1277.4	1237.0	1216.1	1213.7
12.5°	1256.6	1251.7	1199.0	1168.3	1161.0
15°	1234.5	1221.0	1154.8	1114.4	1100.9
17.5°	1208.8	1185.5	1105.8	1053.1	1033.5
20°	1181.8	1147.5	1051.9	984.4	959.9
22.5°	1149.9	1107.0	994.2	912.1	883.9
25°	1116.8	1061.7	932.9	838.6	804.2
27.5°	1082.5	1015.1	869.2	763.8	729.4
30°	1044.5	964.8	803.0	689.0	647.3
32.5°	1004.1	913.3	736.8	615.4	576.2
35°	962.4	860.6	670.6	543.1	503.9
37.5°	919.5	806.7	604.4	474.4	435.2
40°	874.1	751.5	538.2	409.5	371.5
42.5°	827.5	695.1	474.4	348.2	312.6
45°	782.2	638.7	413.1	290.6	256.2
47.5°	734.3	582.3	353.1	236.6	207.2
50°	686.5	525.9	295.5	190.0	170.4
52.5°	637.5	469.5	242.7	155.7	142.2
55°	588.5	413.1	194.9	130.0	121.4
57.5°	539.4	356.8	150.8	110.3	100.5
60°	490.4	301.6	117.7	89.5	80.9
62.5°	440.1	246.4	96.9	71.1	63.7
65°	389.9	196.2	77.2	55.2	50.3
67.5°	339.6	149.6	58.8	42.9	39.2
70°	285.6	106.7	44.1	33.1	31.9
72.5°	239.1	72.3	31.9	25.7	24.5
75°	188.8	51.5	23.3	19.6	18.4
77.5°	145.9	33.1	17.2	15.9	14.7
80°	101.8	18.4	12.3	11.0	11.0
82.5°	62.5	9.8	8.6	7.4	7.4
85°	28.2	4.9	4.9	4.9	4.9
87.5°	4.9	2.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)