

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: P1056005

Luminaire Tested: S124R3DR-S1195D950-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056005
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-S1195D950-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

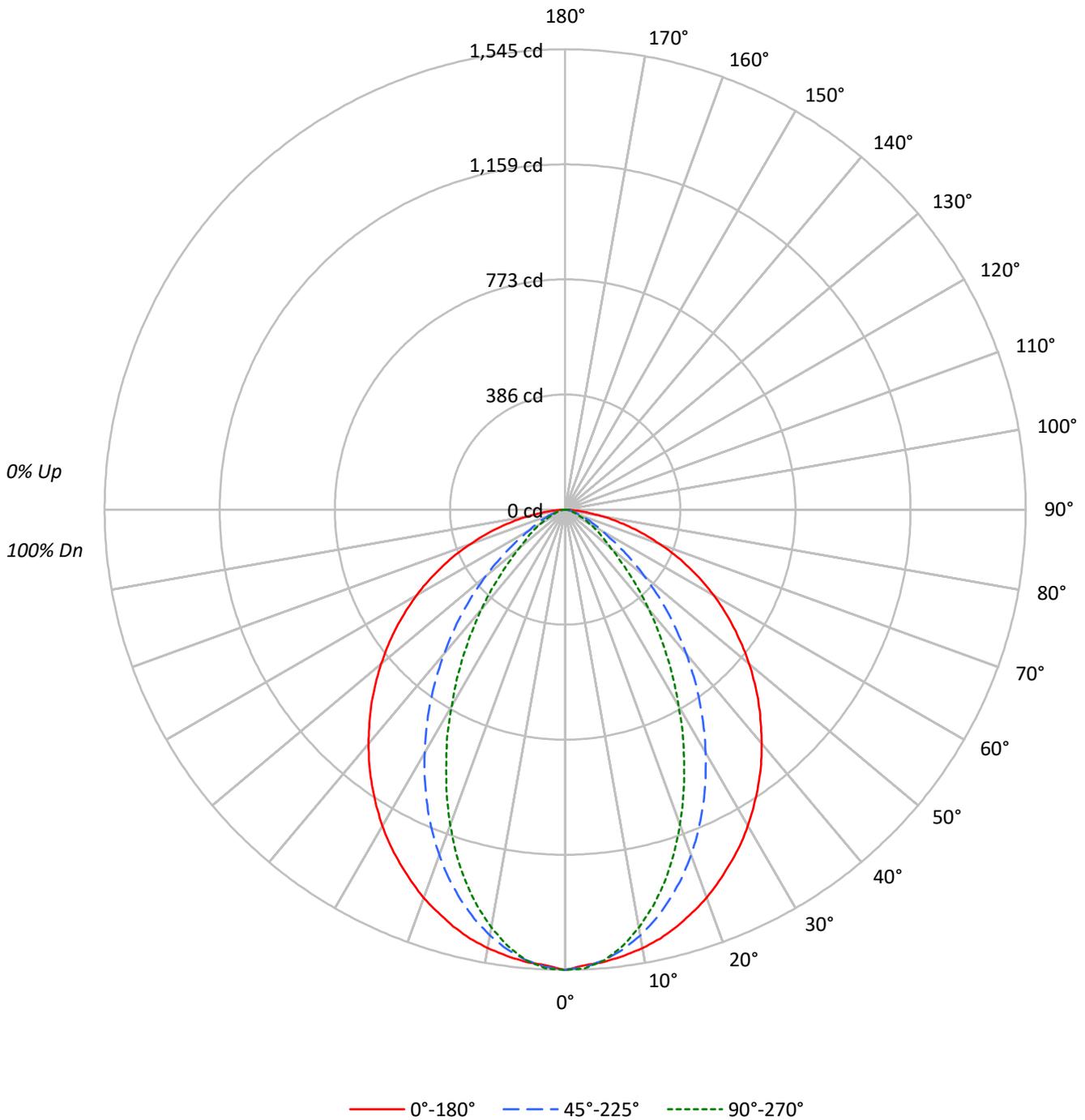
Lumens per Lamp: N/A
Luminaire Lumens: 2498.6 lumens
Efficiency: N/A
Efficacy: 59.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.87 / 1.03
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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°	13662	13662	13662
5°	13523	13472	13472
10°	13421	13033	12788
15°	13261	12405	11826
20°	13050	11615	10600
25°	12786	10681	9207
30°	12514	9621	7756
35°	12190	8494	6382
40°	11839	7290	5031
45°	11477	6063	3760
50°	11082	4769	2751
55°	10645	3527	2195
60°	10176	2442	1680
65°	9571	1895	1234
70°	8665	1339	967
75°	7570	933	738
80°	6079	733	657
85°	3358	588	588

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11477 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	5.7
10°-20°	383.0	15.3
20°-30°	510.8	20.4
30°-40°	514.3	20.6
40°-50°	421.8	16.9
50°-60°	288.3	11.5
60°-70°	161.1	6.4
70°-80°	63.9	2.6
80°-90°	12.1	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°	1037.1	41.5
0°-40°	1551.4	62.1
0°-60°	2261.5	90.5
0°-90°	2498.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2498.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1545	1545	1545	1545	1545	
5°	1524	1541	1518	1511	1518	145
15°	1449	1433	1355	1308	1292	408
25°	1311	1246	1095	984	944	604
35°	1129	1010	787	637	591	706
45°	918	750	485	341	301	708
55°	691	485	229	152	142	618
65°	458	230	91	65	59	452
75°	222	60	27	23	22	237
85°	33	6	6	6	6	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1545.2	1545.2	1545.2	1545.2	1545.2
2.5°	1530.9	1549.6	1536.6	1538.1	1540.9
5°	1523.7	1540.9	1517.9	1510.7	1517.9
7.5°	1510.7	1523.7	1489.1	1474.7	1477.6
10°	1494.9	1499.2	1451.7	1427.3	1424.4
12.5°	1474.7	1469.0	1407.1	1371.2	1362.5
15°	1448.8	1433.0	1355.3	1307.8	1292.0
17.5°	1418.6	1391.3	1297.8	1235.9	1212.9
20°	1387.0	1346.7	1234.5	1155.3	1126.6
22.5°	1349.6	1299.2	1166.8	1070.5	1037.4
25°	1310.7	1246.0	1094.9	984.1	943.8
27.5°	1270.4	1191.3	1020.1	896.4	856.1
30°	1225.8	1132.3	942.4	808.6	759.7
32.5°	1178.4	1071.9	864.7	722.3	676.2
35°	1129.4	1010.0	787.0	637.4	591.3
37.5°	1079.1	946.7	709.3	556.8	510.8
40°	1025.8	882.0	631.6	480.6	435.9
42.5°	971.2	815.8	556.8	408.6	366.9
45°	917.9	749.6	484.9	341.0	300.7
47.5°	861.8	683.4	414.4	277.7	243.2
50°	805.7	617.2	346.7	223.0	200.0
52.5°	748.2	551.1	284.9	182.7	166.9
55°	690.6	484.9	228.8	152.5	142.4
57.5°	633.1	418.7	177.0	129.5	118.0
60°	575.5	353.9	138.1	105.0	95.0
62.5°	516.5	289.2	113.7	83.4	74.8
65°	457.5	230.2	90.6	64.7	59.0
67.5°	398.5	175.5	69.1	50.4	46.0
70°	335.2	125.2	51.8	38.8	37.4
72.5°	280.6	84.9	37.4	30.2	28.8
75°	221.6	60.4	27.3	23.0	21.6
77.5°	171.2	38.8	20.1	18.7	17.3
80°	119.4	21.6	14.4	12.9	12.9
82.5°	73.4	11.5	10.1	8.6	8.6
85°	33.1	5.8	5.8	5.8	5.8
87.5°	5.8	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)