

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056410

Luminaire Tested: S125R3DR-S1270D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S1270D950-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

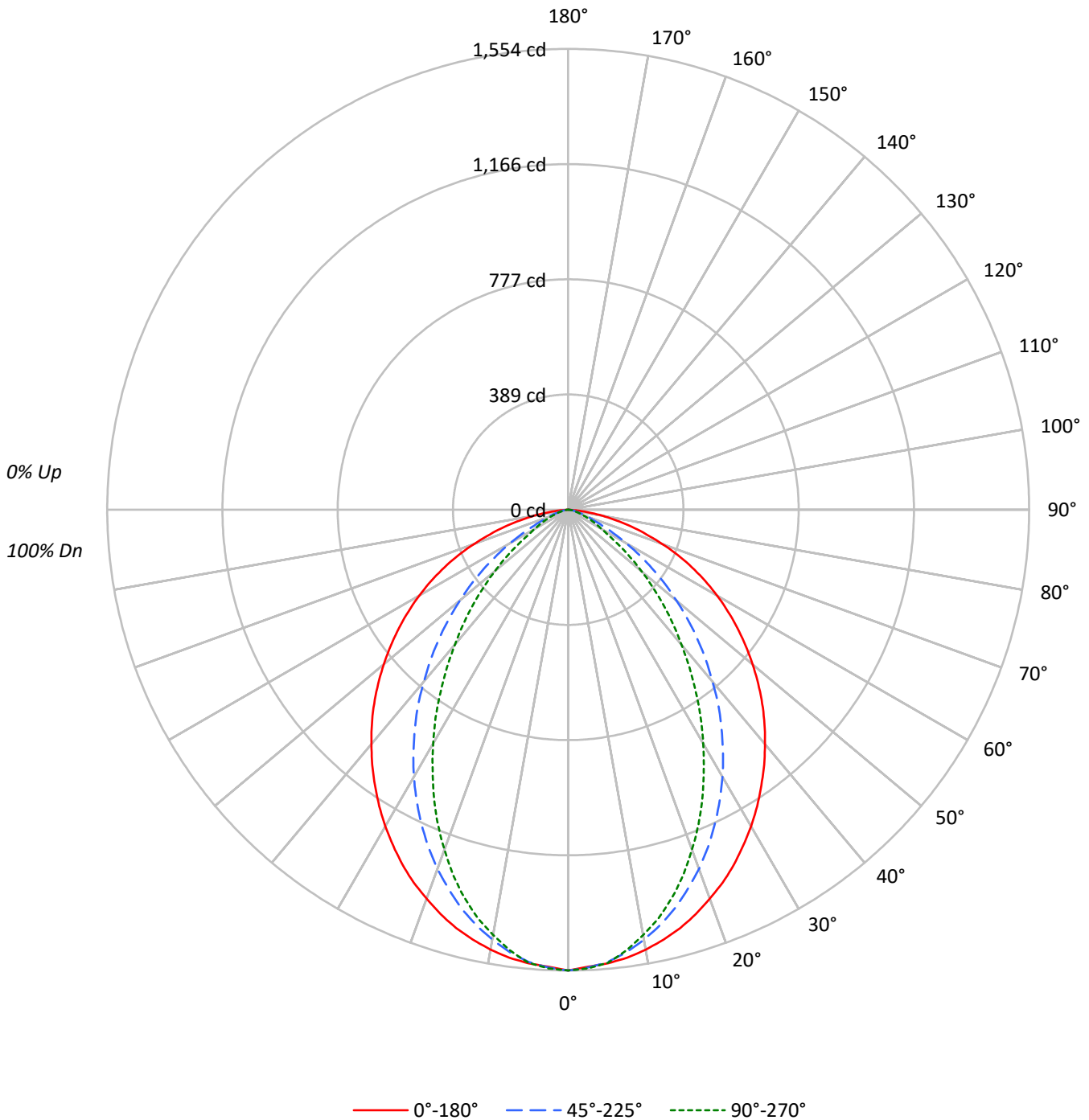
Lumens per Lamp: N/A
Luminaire Lumens: 2808.5 lumens
Efficiency: N/A
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (A_{in}): 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	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10985	10985	10985
5°	10894	10864	10884
10°	10814	10566	10452
15°	10688	10183	9909
20°	10499	9698	9179
25°	10302	9124	8350
30°	10065	8491	7434
35°	9797	7773	6469
40°	9520	6984	5471
45°	9249	6156	4531
50°	8925	5237	3560
55°	8583	4256	2589
60°	8198	3173	1851
65°	7701	2094	1444
70°	6959	1457	1011
75°	6053	942	787
80°	4743	704	643
85°	2450	584	470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9249 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	5.2
10°-20°	393.5	14.0
20°-30°	544.1	19.4
30°-40°	576.5	20.5
40°-50°	503.1	17.9
50°-60°	357.8	12.7
60°-70°	199.0	7.1
70°-80°	76.5	2.7
80°-90°	13.3	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°	1082.3	38.5
0°-40°	1658.8	59.1
0°-60°	2519.7	89.7
0°-90°	2808.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2808.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1535	1547	1531	1526	1534	146
15°	1460	1447	1391	1361	1354	411
25°	1321	1276	1170	1098	1070	608
35°	1135	1058	901	791	750	710
45°	925	814	616	492	453	713
55°	696	558	345	239	210	623
65°	460	302	125	92	86	455
75°	222	86	34	29	29	235
85°	30	9	7	6	6	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1542.4	1558.2	1545.2	1546.7	1548.1
5°	1535.2	1546.7	1530.9	1526.5	1533.7
7.5°	1523.7	1532.3	1505.0	1494.9	1499.2
10°	1506.4	1509.3	1471.9	1457.5	1456.0
12.5°	1484.8	1480.5	1434.5	1411.4	1410.0
15°	1460.4	1447.4	1391.3	1361.1	1353.9
17.5°	1430.1	1410.0	1340.9	1302.1	1290.6
20°	1395.6	1368.3	1289.1	1238.8	1220.1
22.5°	1361.1	1323.7	1231.6	1168.3	1148.1
25°	1320.8	1276.2	1169.7	1097.8	1070.5
27.5°	1277.6	1224.4	1106.4	1023.0	989.9
30°	1233.0	1171.2	1040.2	946.7	910.7
32.5°	1185.6	1115.1	971.2	869.0	831.6
35°	1135.2	1057.5	900.7	791.3	749.6
37.5°	1084.8	998.5	831.6	715.1	671.9
40°	1031.6	938.1	756.8	637.4	592.8
42.5°	979.8	876.2	686.3	564.0	523.7
45°	925.1	814.3	615.8	492.1	453.2
47.5°	869.0	749.6	545.3	424.4	385.6
50°	811.5	686.3	476.2	358.3	323.7
52.5°	753.9	623.0	411.5	294.9	264.7
55°	696.4	558.2	345.3	238.8	210.1
57.5°	638.8	494.9	283.4	187.0	161.1
60°	579.8	430.2	224.4	138.1	130.9
62.5°	520.8	366.9	174.1	113.7	107.9
65°	460.4	302.1	125.2	92.1	86.3
67.5°	400.0	243.2	90.6	70.5	66.2
70°	336.7	185.6	70.5	53.2	48.9
72.5°	276.2	133.8	50.4	38.8	37.4
75°	221.6	86.3	34.5	28.8	28.8
77.5°	166.9	51.8	24.5	21.6	21.6
80°	116.5	30.2	17.3	15.8	15.8
82.5°	70.5	15.8	11.5	10.1	10.1
85°	30.2	8.6	7.2	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.49	20.93	19.85	21.25	21.56	12.12	13.57	12.49	13.88	14.20
	3H	21.05	22.33	21.43	22.66	23.03	12.69	13.97	13.07	14.30	14.67
	4H	21.57	22.77	21.97	23.12	23.50	12.81	14.01	13.21	14.36	14.74
	6H	21.91	23.01	22.32	23.38	23.77	12.88	13.98	13.29	14.35	14.75
	8H	21.99	23.04	22.42	23.43	23.83	12.88	13.93	13.31	14.32	14.73
	12H	22.01	23.02	22.44	23.40	23.83	12.87	13.88	13.30	14.26	14.69
4H	2H	19.38	20.59	19.78	20.94	21.32	12.69	13.89	13.09	14.24	14.62
	3H	21.05	22.04	21.46	22.44	22.84	13.36	14.35	13.77	14.75	15.15
	4H	21.60	22.48	22.03	22.90	23.34	13.52	14.40	13.95	14.82	15.26
	6H	21.99	22.76	22.45	23.20	23.66	13.63	14.40	14.09	14.84	15.30
	8H	22.10	22.81	22.56	23.26	23.72	13.64	14.36	14.11	14.80	15.27
	12H	22.14	22.78	22.63	23.26	23.73	13.65	14.28	14.13	14.76	15.23
8H	4H	21.50	22.22	21.97	22.66	23.13	13.79	14.50	14.26	14.95	15.42
	6H	21.89	22.47	22.39	22.97	23.45	13.92	14.51	14.42	15.00	15.48
	8H	22.00	22.52	22.52	23.03	23.52	13.95	14.48	14.47	14.99	15.48
	12H	22.06	22.52	22.57	23.02	23.59	13.97	14.44	14.49	14.93	15.50
12H	4H	21.47	22.10	21.95	22.58	23.05	13.80	14.44	14.29	14.92	15.39
	6H	21.84	22.36	22.35	22.87	23.36	13.94	14.46	14.45	14.97	15.46
	8H	21.97	22.43	22.48	22.92	23.49	13.99	14.46	14.51	14.95	15.52