

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: P1056411

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
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-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

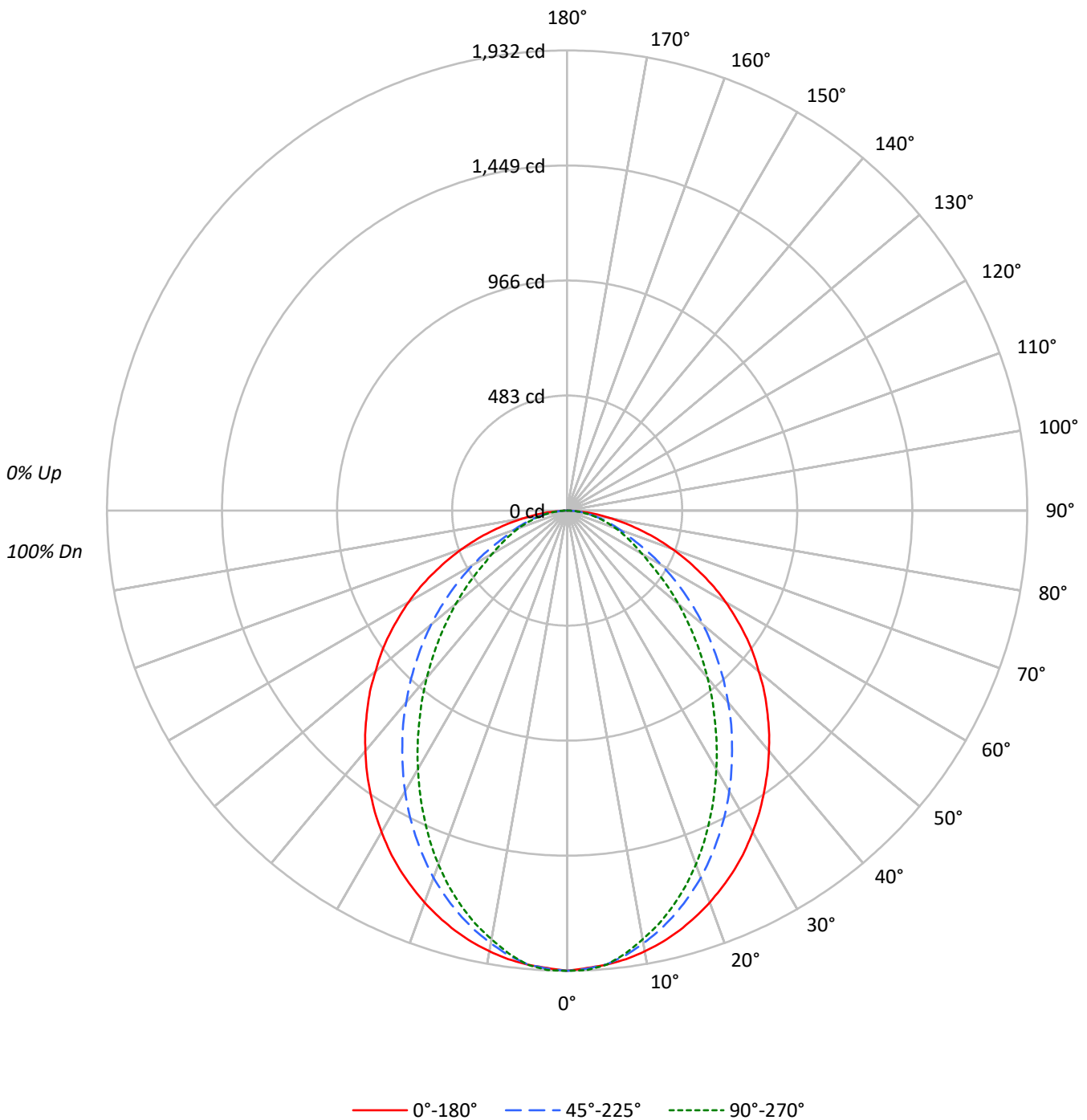
Lumens per Lamp: N/A
Luminaire Lumens: 4095.4 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1056411

CATALOG NUMBER: S125R3DR-S1270D950-X4F0-XX-UDD-F-W

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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13660	13660	13660
5°	13580	13569	13580
10°	13488	13241	13116
15°	13352	12836	12573
20°	13173	12339	11895
25°	12973	11750	11088
30°	12720	11111	10230
35°	12442	10417	9338
40°	12162	9705	8458
45°	11867	8962	7580
50°	11551	8197	6709
55°	11260	7359	5835
60°	10863	6468	5127
65°	10324	5487	4766
70°	9694	4907	4460
75°	8762	4520	4204
80°	7613	4100	3925
85°	5954	3618	3618

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11867 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.8	4.4
10°-20°	496.4	12.1
20°-30°	701.2	17.1
30°-40°	772.0	18.8
40°-50°	720.1	17.6
50°-60°	574.8	14.0
60°-70°	386.8	9.4
70°-80°	206.0	5.0
80°-90°	57.3	1.4
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°	1378.4	33.7
0°-40°	2150.4	52.5
0°-60°	3445.3	84.1
0°-90°	4095.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4095.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1914	1929	1912	1906	1914	182
15°	1824	1814	1754	1724	1718	514
25°	1663	1613	1506	1440	1422	766
35°	1442	1357	1207	1112	1082	902
45°	1187	1075	896	787	758	916
55°	914	776	597	502	473	816
65°	617	482	328	291	285	612
75°	321	213	166	155	154	342
85°	73	50	45	46	45	88
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.3	1932.3	1932.3	1932.3	1932.3
2.5°	1922.2	1938.0	1925.1	1928.0	1930.8
5°	1913.6	1929.4	1912.1	1906.4	1913.6
7.5°	1899.2	1912.1	1883.4	1870.4	1876.2
10°	1879.0	1887.7	1844.5	1827.2	1827.2
12.5°	1854.6	1854.6	1802.8	1778.3	1778.3
15°	1824.4	1814.3	1753.9	1723.7	1717.9
17.5°	1789.8	1771.1	1699.2	1660.4	1653.2
20°	1751.0	1720.8	1640.2	1589.9	1581.2
22.5°	1707.8	1669.0	1575.5	1513.6	1503.5
25°	1663.2	1612.9	1506.4	1440.2	1421.5
27.5°	1612.9	1552.4	1435.9	1361.1	1338.1
30°	1558.2	1489.1	1361.1	1277.6	1253.2
32.5°	1502.1	1424.4	1284.8	1195.6	1168.3
35°	1441.7	1356.8	1207.1	1112.2	1082.0
37.5°	1381.2	1289.1	1130.9	1031.6	1000.0
40°	1317.9	1217.2	1051.7	949.6	916.5
42.5°	1254.6	1146.7	974.1	870.5	835.9
45°	1187.0	1074.8	896.4	787.0	758.2
47.5°	1122.2	1001.4	820.1	713.6	682.0
50°	1050.3	925.1	745.3	638.8	610.0
52.5°	984.1	850.3	670.5	571.2	541.0
55°	913.6	775.5	597.1	502.1	473.4
57.5°	840.2	700.7	526.6	437.4	410.1
60°	768.3	625.9	457.5	375.5	362.6
62.5°	694.9	555.4	392.8	329.5	320.8
65°	617.2	482.0	328.0	290.6	284.9
67.5°	543.9	411.5	276.2	254.7	248.9
70°	469.0	341.0	237.4	218.7	215.8
72.5°	395.7	273.4	200.0	187.0	184.2
75°	320.8	212.9	165.5	155.4	153.9
77.5°	251.8	159.7	130.9	126.6	123.7
80°	187.0	119.4	100.7	97.8	96.4
82.5°	128.1	82.0	71.9	71.9	69.1
85°	73.4	50.4	44.6	46.0	44.6
87.5°	27.3	21.6	20.1	21.6	21.6
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	20.37	21.91	20.74	22.23	22.54	16.75	18.29	17.12	18.61	18.92
	3H	22.16	23.54	22.53	23.87	24.23	18.23	19.61	18.61	19.94	20.30
	4H	22.81	24.11	23.21	24.46	24.84	18.82	20.12	19.22	20.47	20.85
	6H	23.29	24.49	23.70	24.85	25.25	19.28	20.48	19.69	20.85	21.24
	8H	23.44	24.59	23.87	24.97	25.38	19.44	20.59	19.87	20.98	21.38
	12H	23.54	24.63	23.97	25.01	25.44	19.56	20.65	19.99	21.04	21.46
4H	2H	20.51	21.81	20.91	22.15	22.53	17.43	18.73	17.83	19.08	19.46
	3H	22.48	23.56	22.89	23.96	24.36	19.11	20.19	19.52	20.59	20.99
	4H	23.22	24.20	23.65	24.61	25.05	19.81	20.78	20.24	21.20	21.64
	6H	23.82	24.66	24.27	25.11	25.57	20.40	21.24	20.85	21.69	22.15
	8H	24.02	24.82	24.49	25.26	25.73	20.60	21.40	21.07	21.84	22.31
	12H	24.17	24.88	24.65	25.36	25.83	20.77	21.48	21.25	21.95	22.42
8H	4H	23.29	24.08	23.75	24.52	24.99	20.18	20.97	20.64	21.41	21.88
	6H	23.94	24.60	24.44	25.09	25.57	20.88	21.53	21.37	22.02	22.50
	8H	24.20	24.79	24.71	25.30	25.78	21.16	21.75	21.67	22.26	22.75
	12H	24.41	24.93	24.92	25.42	25.98	21.40	21.92	21.91	22.42	22.98
12H	4H	23.28	23.99	23.76	24.47	24.94	20.22	20.93	20.70	21.41	21.88
	6H	23.94	24.53	24.45	25.04	25.53	20.95	21.54	21.46	22.05	22.54
	8H	24.23	24.75	24.74	25.25	25.81	21.29	21.81	21.80	22.30	22.87