

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: P1056546

Luminaire Tested: S125R3DR-H1270D950-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056546
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-H1270D950-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

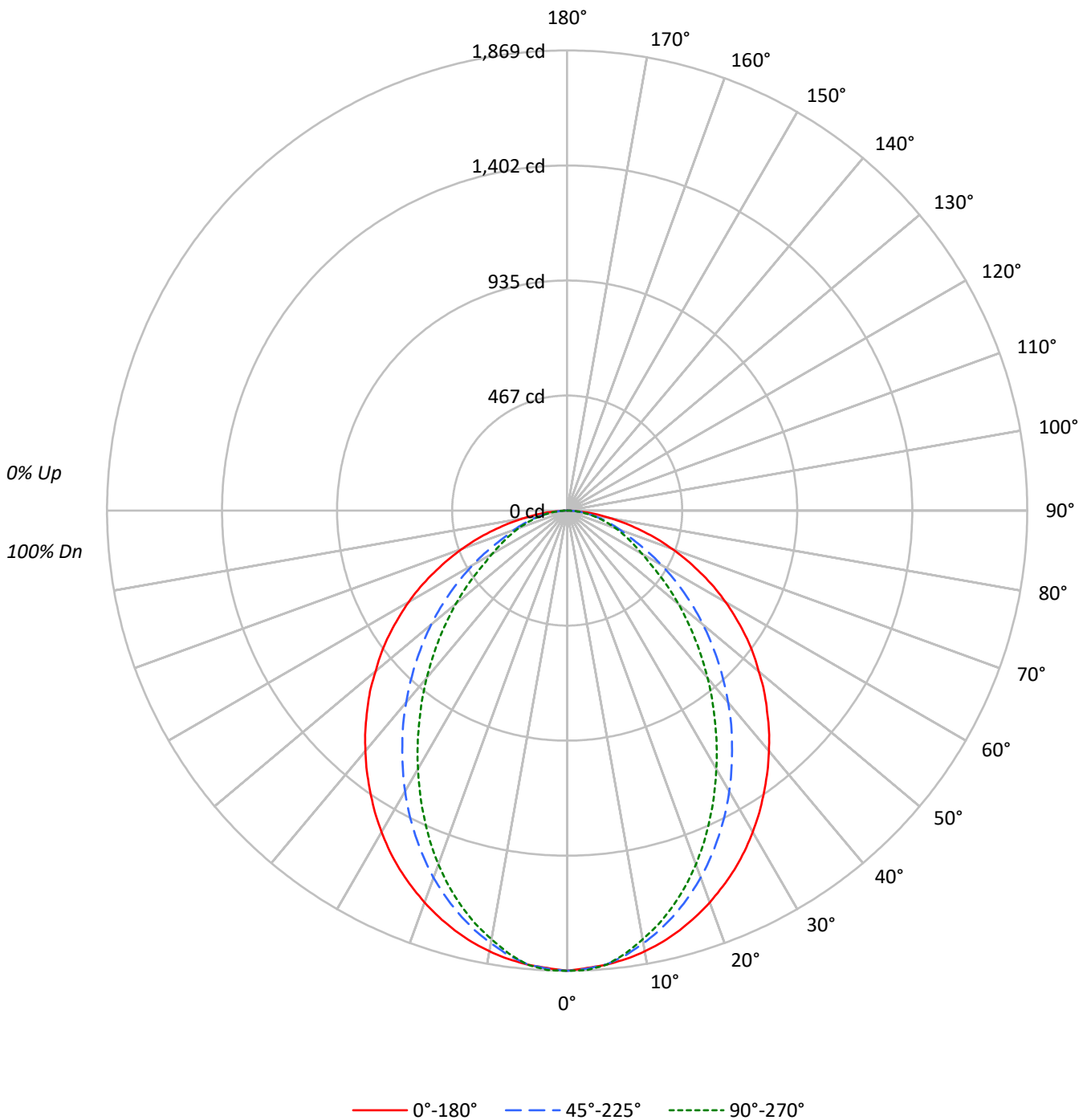
Lumens per Lamp: N/A
Luminaire Lumens: 3961.6 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	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	31	42	35	30	41	35	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13214	13214	13214
5°	13136	13126	13136
10°	13048	12808	12689
15°	12916	12417	12162
20°	12743	11936	11507
25°	12550	11366	10726
30°	12304	10747	9895
35°	12035	10077	9032
40°	11765	9389	8182
45°	11479	8669	7333
50°	11174	7928	6490
55°	10893	7119	5644
60°	10508	6258	4958
65°	9988	5308	4610
70°	9378	4746	4316
75°	8478	4373	4067
80°	7365	3965	3794
85°	5759	3496	3496

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11479 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.9	4.4
10°-20°	480.2	12.1
20°-30°	678.3	17.1
30°-40°	746.7	18.8
40°-50°	696.5	17.6
50°-60°	556.1	14.0
60°-70°	374.2	9.4
70°-80°	199.3	5.0
80°-90°	55.4	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°	1333.4	33.7
0°-40°	2080.1	52.5
0°-60°	3332.7	84.1
0°-90°	3961.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3961.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1869	1869	1869	1869	1869	
5°	1851	1866	1850	1844	1851	176
15°	1765	1755	1697	1667	1662	498
25°	1609	1560	1457	1393	1375	741
35°	1395	1312	1168	1076	1047	873
45°	1148	1040	867	761	734	887
55°	884	750	578	486	458	789
65°	597	466	317	281	276	592
75°	310	206	160	150	149	331
85°	71	49	43	44	43	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1869.2	1869.2	1869.2	1869.2	1869.2
2.5°	1859.4	1874.7	1862.2	1865.0	1867.8
5°	1851.1	1866.4	1849.7	1844.1	1851.1
7.5°	1837.1	1849.7	1821.8	1809.3	1814.9
10°	1817.7	1826.0	1784.3	1767.6	1767.6
12.5°	1794.0	1794.0	1743.9	1720.2	1720.2
15°	1764.8	1755.0	1696.6	1667.3	1661.8
17.5°	1731.4	1713.3	1643.7	1606.1	1599.1
20°	1693.8	1664.6	1586.6	1537.9	1529.6
22.5°	1652.0	1614.5	1524.0	1464.1	1454.4
25°	1608.9	1560.2	1457.2	1393.2	1375.1
27.5°	1560.2	1501.7	1389.0	1316.6	1294.4
30°	1507.3	1440.5	1316.6	1235.9	1212.2
32.5°	1453.0	1377.9	1242.9	1156.6	1130.1
35°	1394.6	1312.4	1167.7	1075.8	1046.6
37.5°	1336.1	1247.0	1093.9	997.9	967.3
40°	1274.9	1177.4	1017.4	918.6	886.6
42.5°	1213.6	1109.2	942.2	842.0	808.6
45°	1148.2	1039.7	867.1	761.3	733.5
47.5°	1085.6	968.7	793.3	690.3	659.7
50°	1016.0	894.9	720.9	617.9	590.1
52.5°	952.0	822.5	648.6	552.5	523.3
55°	883.8	750.2	577.6	485.7	457.9
57.5°	812.8	677.8	509.4	423.1	396.7
60°	743.2	605.4	442.6	363.3	350.7
62.5°	672.2	537.2	380.0	318.7	310.4
65°	597.1	466.2	317.3	281.1	275.6
67.5°	526.1	398.0	267.2	246.3	240.8
70°	453.7	329.9	229.6	211.5	208.8
72.5°	382.7	264.4	193.5	180.9	178.1
75°	310.4	206.0	160.1	150.3	148.9
77.5°	243.6	154.5	126.7	122.5	119.7
80°	180.9	115.5	97.4	94.6	93.2
82.5°	123.9	79.3	69.6	69.6	66.8
85°	71.0	48.7	43.1	44.5	43.1
87.5°	26.4	20.9	19.5	20.9	20.9
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	20.26	21.80	20.62	22.11	22.42	16.64	18.18	17.00	18.49	18.81
	3H	22.04	23.43	22.42	23.75	24.11	18.11	19.50	18.49	19.83	20.19
	4H	22.70	23.99	23.09	24.34	24.72	18.70	20.00	19.10	20.35	20.73
	6H	23.17	24.37	23.58	24.74	25.13	19.17	20.37	19.58	20.73	21.13
	8H	23.33	24.47	23.75	24.86	25.26	19.33	20.47	19.75	20.86	21.26
	12H	23.42	24.52	23.85	24.90	25.33	19.44	20.54	19.87	20.92	21.35
4H	2H	20.39	21.69	20.79	22.04	22.42	17.32	18.61	17.72	18.96	19.34
	3H	22.36	23.44	22.77	23.84	24.24	18.99	20.07	19.40	20.47	20.87
	4H	23.11	24.08	23.54	24.50	24.93	19.70	20.67	20.13	21.08	21.52
	6H	23.70	24.55	24.16	24.99	25.45	20.28	21.13	20.74	21.57	22.03
	8H	23.91	24.70	24.37	25.14	25.61	20.49	21.28	20.95	21.73	22.19
	12H	24.05	24.76	24.54	25.24	25.71	20.65	21.36	21.13	21.84	22.31
8H	4H	23.17	23.96	23.63	24.41	24.87	20.06	20.85	20.52	21.30	21.76
	6H	23.83	24.49	24.33	24.98	25.45	20.76	21.42	21.26	21.91	22.39
	8H	24.08	24.67	24.60	25.18	25.67	21.05	21.63	21.56	22.14	22.63
	12H	24.29	24.81	24.80	25.30	25.87	21.29	21.81	21.80	22.30	22.86
12H	4H	23.16	23.87	23.64	24.35	24.82	20.11	20.82	20.59	21.29	21.77
	6H	23.82	24.41	24.34	24.92	25.41	20.83	21.42	21.35	21.93	22.42
	8H	24.12	24.64	24.63	25.13	25.69	21.18	21.70	21.69	22.19	22.75