

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: P1056537

Luminaire Tested: S125R3DR-H1270D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056537
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-H1270D930-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

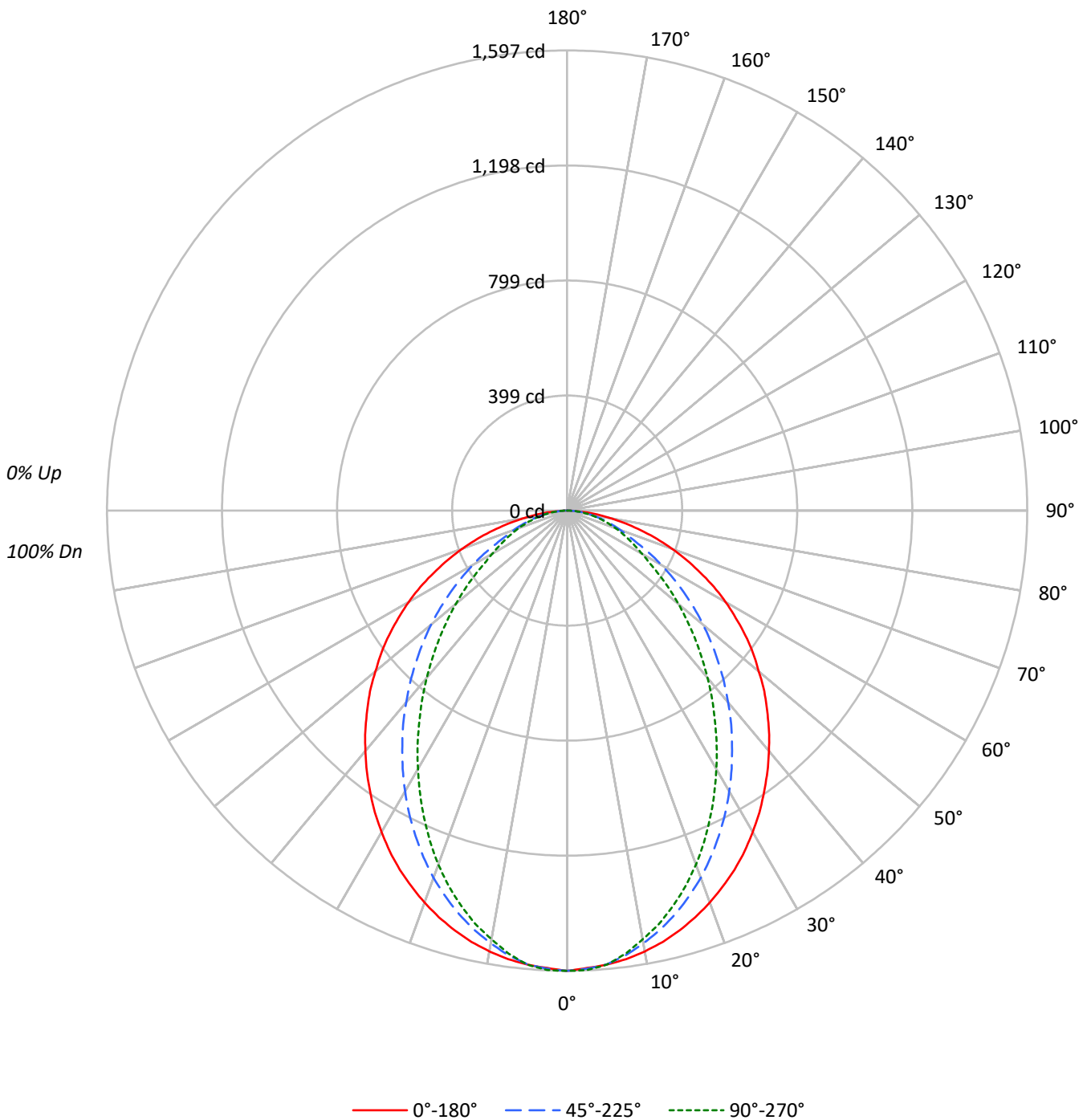
Lumens per Lamp: N/A
Luminaire Lumens: 3385.7 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
Input Voltage (V): 120
Input Current (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: P1056537

CATALOG NUMBER: S125R3DR-H1270D930-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°	11293	11293	11293
5°	11226	11217	11226
10°	11151	10946	10844
15°	11038	10611	10394
20°	10890	10200	9834
25°	10725	9714	9167
30°	10515	9185	8457
35°	10285	8612	7719
40°	10054	8024	6992
45°	9811	7408	6266
50°	9550	6776	5546
55°	9309	6084	4823
60°	8981	5347	4237
65°	8536	4536	3939
70°	8016	4057	3687
75°	7244	3737	3477
80°	6294	3391	3245
85°	4923	2993	2993

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9811 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	4.4
10°-20°	410.4	12.1
20°-30°	579.7	17.1
30°-40°	638.2	18.8
40°-50°	595.3	17.6
50°-60°	475.2	14.0
60°-70°	319.8	9.4
70°-80°	170.3	5.0
80°-90°	47.3	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°	1139.5	33.7
0°-40°	1777.7	52.5
0°-60°	2848.2	84.1
0°-90°	3385.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3385.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1582	1595	1581	1576	1582	150
15°	1508	1500	1450	1425	1420	425
25°	1375	1333	1245	1191	1175	633
35°	1192	1122	998	919	894	746
45°	981	888	741	651	627	758
55°	755	641	494	415	391	674
65°	510	398	271	240	236	506
75°	265	176	137	128	127	283
85°	61	42	37	38	37	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1597.4	1597.4	1597.4	1597.4	1597.4
2.5°	1589.1	1602.2	1591.5	1593.8	1596.2
5°	1581.9	1595.0	1580.7	1576.0	1581.9
7.5°	1570.0	1580.7	1557.0	1546.3	1551.0
10°	1553.4	1560.5	1524.8	1510.6	1510.6
12.5°	1533.2	1533.2	1490.3	1470.1	1470.1
15°	1508.2	1499.9	1449.9	1424.9	1420.2
17.5°	1479.6	1464.2	1404.7	1372.6	1366.6
20°	1447.5	1422.6	1355.9	1314.3	1307.2
22.5°	1411.8	1379.7	1302.4	1251.3	1242.9
25°	1375.0	1333.3	1245.3	1190.6	1175.2
27.5°	1333.3	1283.4	1187.0	1125.2	1106.2
30°	1288.1	1231.1	1125.2	1056.2	1036.0
32.5°	1241.8	1177.5	1062.2	988.4	965.8
35°	1191.8	1121.6	997.9	919.4	894.4
37.5°	1141.8	1065.7	934.9	852.8	826.7
40°	1089.5	1006.3	869.5	785.0	757.7
42.5°	1037.2	948.0	805.2	719.6	691.1
45°	981.3	888.5	741.0	650.6	626.8
47.5°	927.8	827.8	678.0	590.0	563.8
50°	868.3	764.8	616.1	528.1	504.3
52.5°	813.6	703.0	554.3	472.2	447.2
55°	755.3	641.1	493.6	415.1	391.3
57.5°	694.6	579.2	435.3	361.6	339.0
60°	635.2	517.4	378.2	310.4	299.7
62.5°	574.5	459.1	324.7	272.4	265.2
65°	510.3	398.5	271.2	240.3	235.5
67.5°	449.6	340.2	228.4	210.5	205.8
70°	387.8	281.9	196.3	180.8	178.4
72.5°	327.1	226.0	165.3	154.6	152.2
75°	265.2	176.0	136.8	128.5	127.3
77.5°	208.1	132.0	108.2	104.7	102.3
80°	154.6	98.7	83.3	80.9	79.7
82.5°	105.9	67.8	59.5	59.5	57.1
85°	60.7	41.6	36.9	38.1	36.9
87.5°	22.6	17.8	16.7	17.8	17.8
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	19.71	21.25	20.08	21.56	21.88	16.09	17.63	16.46	17.95	18.26
	3H	21.50	22.88	21.87	23.21	23.57	17.57	18.95	17.95	19.28	19.64
	4H	22.15	23.45	22.55	23.80	24.17	18.16	19.46	18.56	19.81	20.18
	6H	22.63	23.83	23.04	24.19	24.58	18.62	19.82	19.03	20.19	20.58
	8H	22.78	23.92	23.21	24.31	24.71	18.78	19.93	19.21	20.32	20.72
	12H	22.88	23.97	23.31	24.35	24.78	18.90	19.99	19.33	20.37	20.80
4H	2H	19.84	21.14	20.24	21.49	21.87	16.77	18.07	17.17	18.42	18.80
	3H	21.82	22.90	22.23	23.30	23.70	18.45	19.53	18.86	19.93	20.33
	4H	22.56	23.53	22.99	23.95	24.39	19.15	20.12	19.58	20.54	20.98
	6H	23.15	24.00	23.61	24.44	24.90	19.74	20.58	20.19	21.03	21.49
	8H	23.36	24.15	23.82	24.60	25.06	19.94	20.74	20.41	21.18	21.65
	12H	23.51	24.22	23.99	24.70	25.17	20.11	20.81	20.59	21.29	21.76
8H	4H	22.62	23.42	23.09	23.86	24.33	19.51	20.31	19.98	20.75	21.22
	6H	23.28	23.94	23.78	24.43	24.91	20.22	20.87	20.71	21.36	21.84
	8H	23.54	24.13	24.05	24.63	25.12	20.50	21.09	21.01	21.60	22.09
	12H	23.75	24.27	24.25	24.76	25.32	20.74	21.26	21.25	21.76	22.32
12H	4H	22.62	23.33	23.10	23.80	24.27	19.56	20.27	20.04	20.75	21.22
	6H	23.28	23.87	23.79	24.38	24.86	20.29	20.88	20.80	21.39	21.87
	8H	23.57	24.09	24.08	24.58	25.15	20.63	21.15	21.14	21.64	22.21