

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: P1056402

Luminaire Tested: S125R3DR-S1270D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056402  
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-S1270D930-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

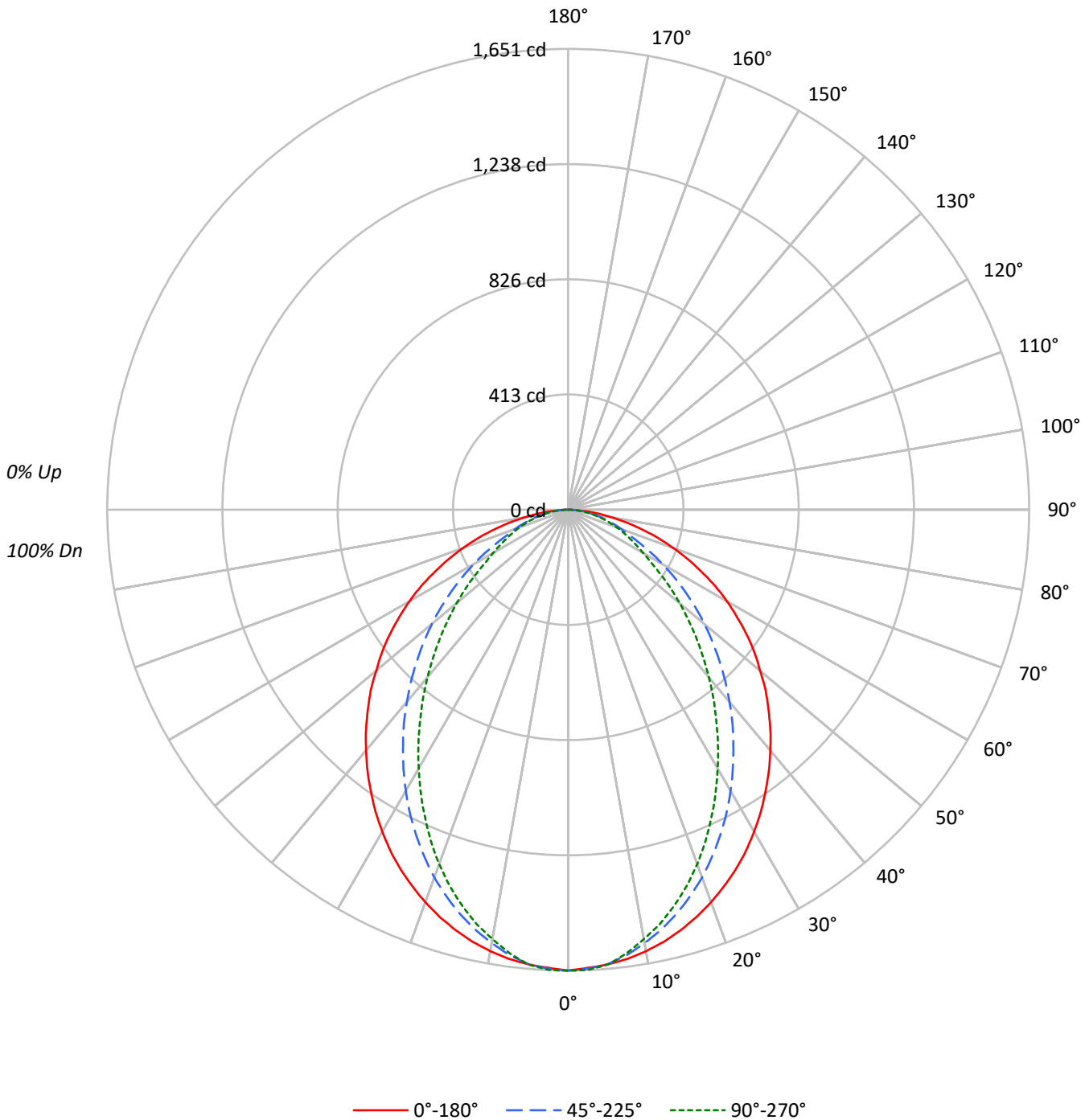
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3500.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 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): 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	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°	11674	11674	11674
5°	11605	11596	11605
10°	11528	11315	11210
15°	11411	10970	10745
20°	11257	10545	10166
25°	11087	10042	9476
30°	10871	9495	8743
35°	10633	8903	7980
40°	10394	8294	7229
45°	10142	7658	6478
50°	9872	7005	5733
55°	9623	6289	4985
60°	9283	5528	4382
65°	8824	4689	4073
70°	8284	4194	3811
75°	7489	3862	3594
80°	6506	3505	3355
85°	5086	3090	3090

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10142 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.5	4.4
10°-20°	424.2	12.1
20°-30°	599.3	17.1
30°-40°	659.7	18.8
40°-50°	615.4	17.6
50°-60°	491.3	14.0
60°-70°	330.6	9.4
70°-80°	176.1	5.0
80°-90°	48.9	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°	1178.0	33.7
0°-40°	1837.7	52.5
0°-60°	2944.4	84.1
0°-90°	3500.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3500.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1651	1651	1651	1651	1651	
5°	1635	1649	1634	1629	1635	155
15°	1559	1550	1499	1473	1468	440
25°	1421	1378	1287	1231	1215	654
35°	1232	1160	1032	950	925	771
45°	1014	918	766	673	648	783
55°	781	663	510	429	404	697
65°	528	412	280	248	244	523
75°	274	182	141	133	132	292
85°	63	43	38	39	38	75
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1651.3	1651.3	1651.3	1651.3	1651.3
2.5°	1642.7	1656.3	1645.2	1647.7	1650.1
5°	1635.4	1648.9	1634.1	1629.2	1635.4
7.5°	1623.1	1634.1	1609.5	1598.5	1603.4
10°	1605.9	1613.2	1576.3	1561.6	1561.6
12.5°	1584.9	1584.9	1540.7	1519.8	1519.8
15°	1559.1	1550.5	1498.9	1473.1	1468.1
17.5°	1529.6	1513.6	1452.2	1419.0	1412.8
20°	1496.4	1470.6	1401.7	1358.7	1351.3
22.5°	1459.5	1426.3	1346.4	1293.5	1284.9
25°	1421.4	1378.4	1287.4	1230.8	1214.8
27.5°	1378.4	1326.7	1227.1	1163.2	1143.5
30°	1331.7	1272.6	1163.2	1091.9	1071.0
32.5°	1283.7	1217.3	1098.0	1021.8	998.4
35°	1232.1	1159.5	1031.6	950.5	924.7
37.5°	1180.4	1101.7	966.5	881.6	854.6
40°	1126.3	1040.2	898.8	811.5	783.3
42.5°	1072.2	980.0	832.4	743.9	714.4
45°	1014.4	918.5	766.0	672.6	648.0
47.5°	959.1	855.8	700.9	609.9	582.8
50°	897.6	790.6	636.9	545.9	521.3
52.5°	841.0	726.7	573.0	488.1	462.3
55°	780.8	662.8	510.3	429.1	404.5
57.5°	718.1	598.8	450.0	373.8	350.4
60°	656.6	534.9	391.0	320.9	309.9
62.5°	593.9	474.6	335.7	281.6	274.2
65°	527.5	411.9	280.3	248.4	243.5
67.5°	464.8	351.7	236.1	217.6	212.7
70°	400.8	291.4	202.9	186.9	184.4
72.5°	338.1	233.6	170.9	159.8	157.4
75°	274.2	182.0	141.4	132.8	131.6
77.5°	215.2	136.5	111.9	108.2	105.7
80°	159.8	102.1	86.1	83.6	82.4
82.5°	109.4	70.1	61.5	61.5	59.0
85°	62.7	43.0	38.1	39.3	38.1
87.5°	23.4	18.4	17.2	18.4	18.4
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	19.83	21.37	20.19	21.68	21.99	16.21	17.75	16.57	18.06	18.38
	3H	21.61	22.99	21.99	23.32	23.68	17.68	19.07	18.06	19.40	19.76
	4H	22.26	23.56	22.66	23.91	24.29	18.27	19.57	18.67	19.92	20.30
	6H	22.74	23.94	23.15	24.31	24.70	18.74	19.94	19.15	20.30	20.70
	8H	22.90	24.04	23.32	24.43	24.83	18.90	20.04	19.32	20.43	20.83
	12H	22.99	24.09	23.42	24.47	24.90	19.01	20.11	19.44	20.49	20.92
4H	2H	19.96	21.26	20.36	21.61	21.99	16.88	18.18	17.28	18.53	18.91
	3H	21.93	23.01	22.34	23.41	23.81	18.56	19.64	18.97	20.04	20.44
	4H	22.68	23.65	23.11	24.06	24.50	19.27	20.24	19.70	20.65	21.09
	6H	23.27	24.12	23.73	24.56	25.02	19.85	20.70	20.31	21.14	21.60
	8H	23.48	24.27	23.94	24.71	25.18	20.06	20.85	20.52	21.30	21.76
	12H	23.62	24.33	24.11	24.81	25.28	20.22	20.93	20.70	21.41	21.88
8H	4H	22.74	23.53	23.20	23.98	24.44	19.63	20.42	20.09	20.87	21.33
	6H	23.40	24.06	23.89	24.55	25.02	20.33	20.99	20.83	21.48	21.95
	8H	23.65	24.24	24.17	24.75	25.24	20.62	21.20	21.13	21.71	22.20
	12H	23.86	24.38	24.37	24.87	25.44	20.86	21.38	21.37	21.87	22.43
12H	4H	22.73	23.44	23.21	23.92	24.39	19.68	20.39	20.16	20.86	21.33
	6H	23.39	23.98	23.91	24.49	24.98	20.40	20.99	20.92	21.50	21.99
	8H	23.69	24.21	24.20	24.70	25.26	20.75	21.27	21.26	21.76	22.32