

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: P1056390

Luminaire Tested: S125R3DRP-S1270D835-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056390  
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: S125R3DRP-S1270D835-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

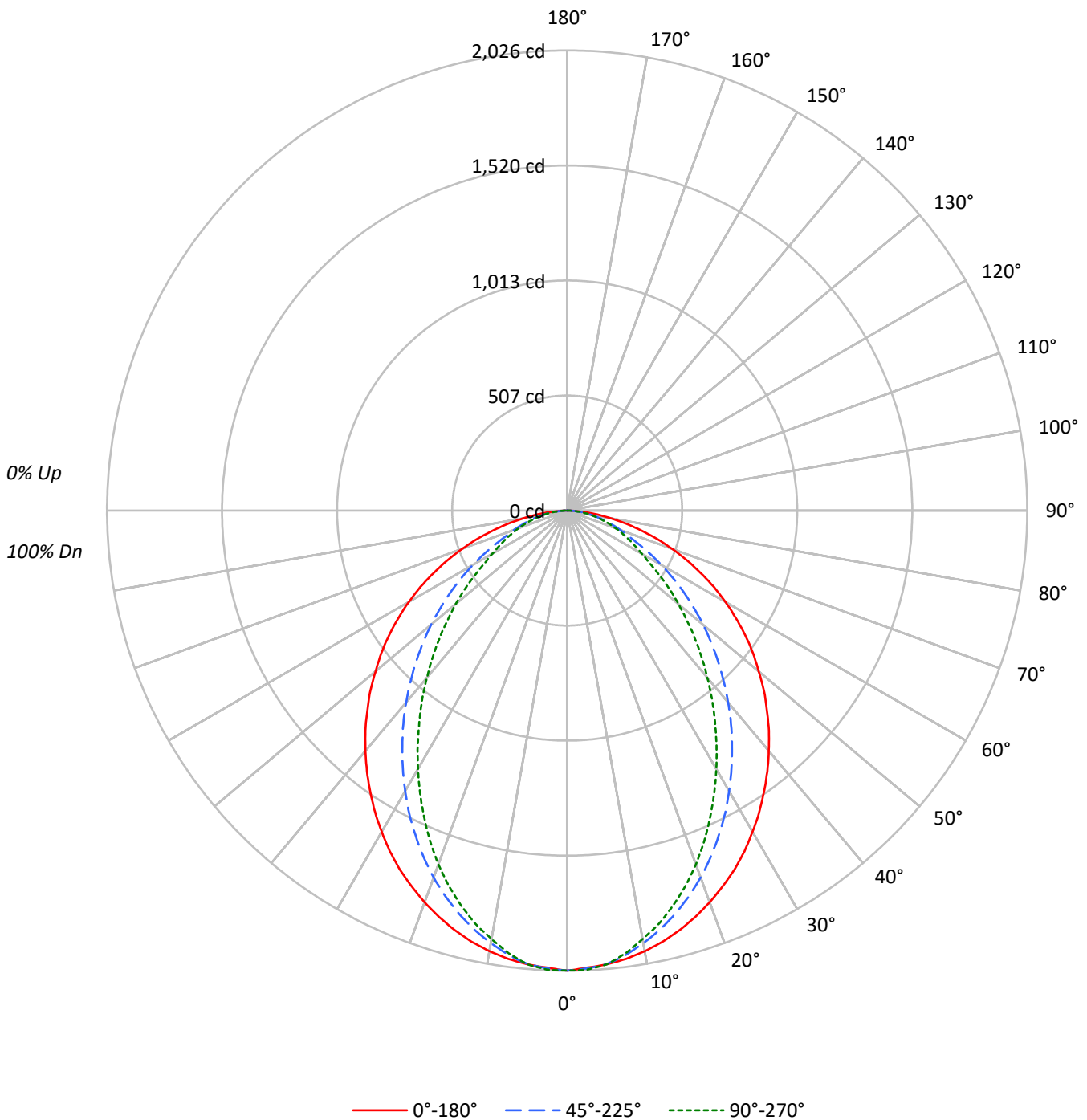
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4292.9 lumens  
Efficiency: N/A  
Efficacy: 102.5 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	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													100															
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86													86															
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73													73															
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63													63															
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55													55															
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48													48															
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43													43															
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38													38															
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34													34															
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31													31															
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28													28															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14319	14319	14319
5°	14234	14223	14234
10°	14139	13879	13749
15°	13996	13455	13179
20°	13808	12934	12469
25°	13599	12316	11623
30°	13333	11646	10723
35°	13042	10920	9787
40°	12749	10174	8866
45°	12439	9394	7946
50°	12109	8592	7033
55°	11804	7714	6116
60°	11387	6781	5374
65°	10823	5753	4995
70°	10163	5143	4675
75°	9186	4736	4408
80°	7983	4299	4112
85°	6237	3796	3796

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12439 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.5	4.4
10°-20°	520.4	12.1
20°-30°	735.0	17.1
30°-40°	809.2	18.8
40°-50°	754.8	17.6
50°-60°	602.6	14.0
60°-70°	405.5	9.4
70°-80°	216.0	5.0
80°-90°	60.0	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°	1444.9	33.7
0°-40°	2254.1	52.5
0°-60°	3611.4	84.1
0°-90°	4292.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4292.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2026	2026	2026	2026	2026	
5°	2006	2022	2004	1998	2006	190
15°	1912	1902	1838	1807	1801	539
25°	1743	1691	1579	1510	1490	802
35°	1511	1422	1265	1166	1134	946
45°	1244	1127	940	825	795	961
55°	958	813	626	526	496	855
65°	647	505	344	305	299	642
75°	336	223	173	163	161	358
85°	77	53	47	48	47	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2025.5	2025.5	2025.5	2025.5	2025.5
2.5°	2014.9	2031.5	2017.9	2020.9	2023.9
5°	2005.8	2022.4	2004.3	1998.3	2005.8
7.5°	1990.8	2004.3	1974.2	1960.6	1966.6
10°	1969.6	1978.7	1933.5	1915.4	1915.4
12.5°	1944.0	1944.0	1889.7	1864.1	1864.1
15°	1912.3	1901.8	1838.4	1806.8	1800.7
17.5°	1876.1	1856.5	1781.1	1740.4	1732.9
20°	1835.4	1803.8	1719.3	1666.5	1657.5
22.5°	1790.2	1749.5	1651.4	1586.6	1576.0
25°	1743.4	1690.6	1579.0	1509.7	1490.1
27.5°	1690.6	1627.3	1505.1	1426.7	1402.6
30°	1633.3	1560.9	1426.7	1339.2	1313.6
32.5°	1574.5	1493.1	1346.8	1253.3	1224.6
35°	1511.2	1422.2	1265.3	1165.8	1134.1
37.5°	1447.8	1351.3	1185.4	1081.3	1048.2
40°	1381.5	1275.9	1102.5	995.4	960.7
42.5°	1315.1	1202.0	1021.0	912.4	876.2
45°	1244.2	1126.6	939.6	825.0	794.8
47.5°	1176.4	1049.7	859.6	748.0	714.9
50°	1101.0	969.7	781.2	669.6	639.5
52.5°	1031.6	891.3	702.8	598.7	567.1
55°	957.7	812.9	625.9	526.3	496.2
57.5°	880.8	734.5	552.0	458.5	429.8
60°	805.4	656.0	479.6	393.6	380.1
62.5°	728.4	582.1	411.7	345.4	336.3
65°	647.0	505.2	343.9	304.6	298.6
67.5°	570.1	431.3	289.6	266.9	260.9
70°	491.7	357.4	248.8	229.2	226.2
72.5°	414.7	286.5	209.6	196.1	193.0
75°	336.3	223.2	173.4	162.9	161.4
77.5°	263.9	167.4	137.2	132.7	129.7
80°	196.1	125.2	105.6	102.6	101.0
82.5°	134.2	86.0	75.4	75.4	72.4
85°	76.9	52.8	46.8	48.3	46.8
87.5°	28.7	22.6	21.1	22.6	22.6
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	20.54	22.08	20.90	22.39	22.70	16.92	18.46	17.28	18.77	19.09
	3H	22.32	23.70	22.70	24.03	24.39	18.39	19.78	18.77	20.10	20.47
	4H	22.97	24.27	23.37	24.62	25.00	18.98	20.28	19.38	20.63	21.01
	6H	23.45	24.65	23.86	25.02	25.41	19.45	20.65	19.86	21.01	21.41
	8H	23.60	24.75	24.03	25.14	25.54	19.61	20.75	20.03	21.14	21.54
	12H	23.70	24.80	24.13	25.18	25.61	19.72	20.82	20.15	21.20	21.63
4H	2H	20.67	21.97	21.07	22.32	22.70	17.59	18.89	17.99	19.24	19.62
	3H	22.64	23.72	23.05	24.12	24.52	19.27	20.35	19.68	20.75	21.15
	4H	23.39	24.36	23.82	24.77	25.21	19.97	20.95	20.41	21.36	21.80
	6H	23.98	24.83	24.44	25.27	25.73	20.56	21.41	21.02	21.85	22.31
	8H	24.19	24.98	24.65	25.42	25.89	20.77	21.56	21.23	22.01	22.47
	12H	24.33	25.04	24.82	25.52	25.99	20.93	21.64	21.41	22.12	22.59
8H	4H	23.45	24.24	23.91	24.69	25.15	20.34	21.13	20.80	21.58	22.04
	6H	24.11	24.76	24.60	25.25	25.73	21.04	21.70	21.54	22.19	22.66
	8H	24.36	24.95	24.88	25.46	25.95	21.32	21.91	21.84	22.42	22.91
	12H	24.57	25.09	25.08	25.58	26.15	21.57	22.09	22.08	22.58	23.14
12H	4H	23.44	24.15	23.92	24.63	25.10	20.39	21.10	20.87	21.57	22.04
	6H	24.10	24.69	24.62	25.20	25.69	21.11	21.70	21.63	22.21	22.70
	8H	24.40	24.92	24.91	25.41	25.97	21.46	21.98	21.96	22.47	23.03