

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: P1056388

Luminaire Tested: S125R3DR-S1270D835-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056388  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S1270D835-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

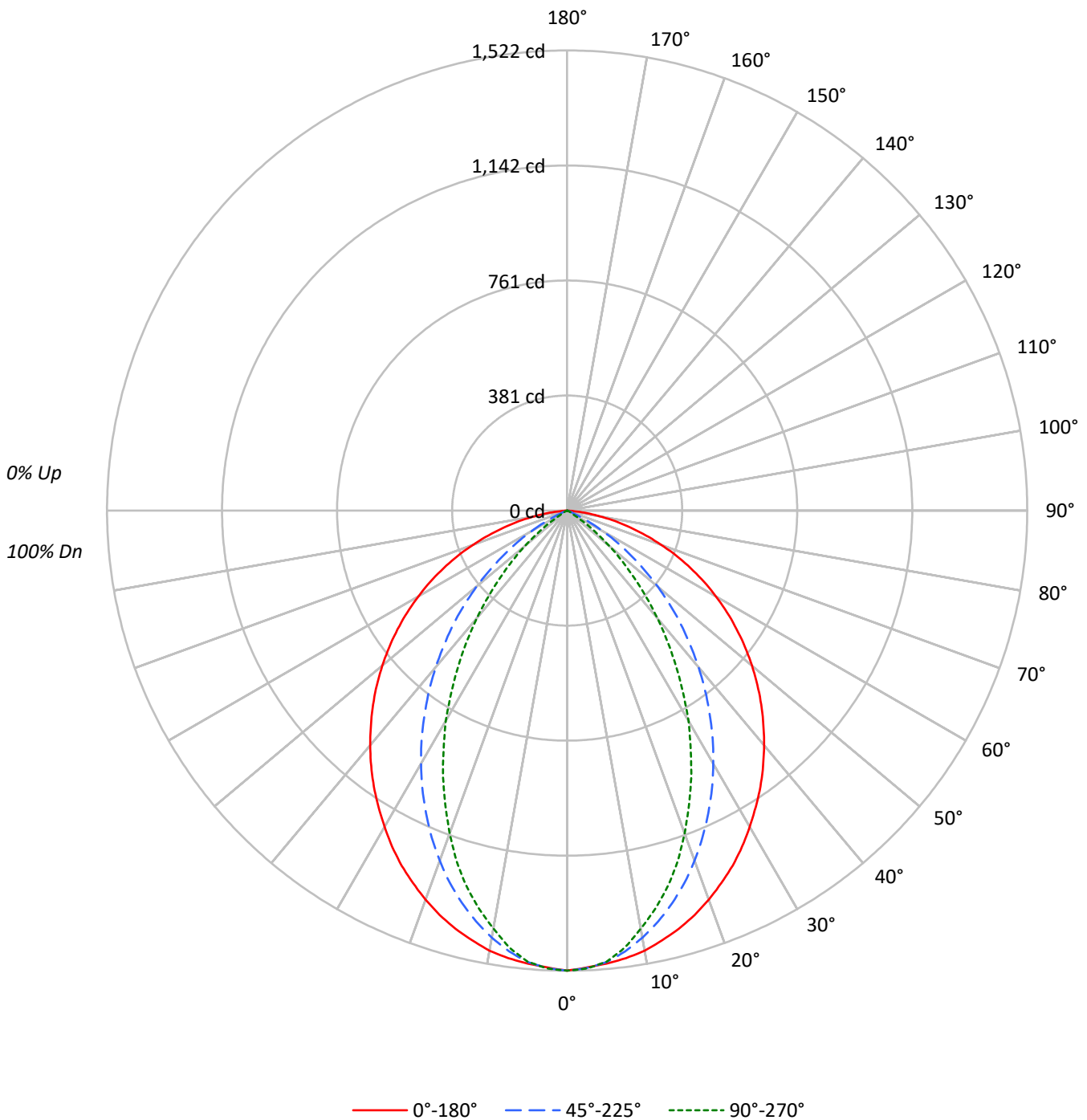
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2466.5 lumens  
Efficiency: N/A  
Efficacy: 58.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	10757	10757	10757
5°	10670	10638	10627
10°	10610	10296	10079
15°	10475	9835	9416
20°	10302	9270	8543
25°	10105	8611	7576
30°	9861	7891	6549
35°	9618	7093	5415
40°	9353	6236	4287
45°	9077	5323	3106
50°	8774	4296	2007
55°	8439	3142	892
60°	8039	1940	256
65°	7542	706	151
70°	6827	250	62
75°	5933	82	41
80°	4543	61	0
85°	2076	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9077 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.3	5.7
10°-20°	379.5	15.4
20°-30°	513.4	20.8
30°-40°	527.4	21.4
40°-50°	437.0	17.7
50°-60°	280.5	11.4
60°-70°	135.5	5.5
70°-80°	45.8	1.9
80°-90°	5.9	0.2
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°	1034.3	41.9
0°-40°	1561.7	63.3
0°-60°	2279.2	92.4
0°-90°	2466.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2466.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1522	1522	1522	1522	1522	
5°	1504	1516	1499	1490	1498	143
15°	1431	1413	1344	1297	1286	403
25°	1296	1232	1104	1004	971	596
35°	1114	1007	822	679	627	697
45°	908	759	532	368	311	700
55°	685	502	255	112	72	612
65°	451	249	42	12	9	446
75°	217	47	3	2	2	230
85°	26	0	0	0	0	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1521.7	1521.7	1521.7	1521.7	1521.7
2.5°	1512.7	1524.7	1514.2	1512.7	1515.7
5°	1503.6	1515.7	1499.1	1490.1	1497.6
7.5°	1493.1	1499.1	1470.5	1455.4	1458.4
10°	1478.0	1476.5	1434.3	1408.6	1404.1
12.5°	1455.4	1447.8	1392.0	1355.8	1348.3
15°	1431.2	1413.1	1343.8	1297.0	1286.5
17.5°	1402.6	1373.9	1291.0	1230.7	1215.6
20°	1369.4	1330.2	1232.2	1158.3	1135.6
22.5°	1333.2	1283.4	1170.3	1082.9	1052.7
25°	1295.5	1232.2	1104.0	1004.4	971.3
27.5°	1253.3	1179.4	1037.6	924.5	883.8
30°	1208.0	1123.6	966.7	843.1	802.3
32.5°	1161.3	1067.8	895.8	761.6	711.8
35°	1114.5	1007.4	821.9	678.7	627.4
37.5°	1064.8	947.1	749.6	600.2	544.4
40°	1013.5	885.3	675.7	518.8	464.5
42.5°	960.7	821.9	601.8	441.9	386.1
45°	907.9	758.6	532.4	368.0	310.7
47.5°	853.6	693.8	460.0	295.6	245.8
50°	797.8	630.4	390.6	230.7	182.5
52.5°	742.0	565.6	319.7	167.4	123.7
55°	684.7	502.2	254.9	111.6	72.4
57.5°	627.4	437.4	194.6	61.8	27.1
60°	568.6	375.5	137.2	21.1	18.1
62.5°	511.3	309.2	86.0	16.6	13.6
65°	450.9	248.8	42.2	12.1	9.0
67.5°	392.1	191.5	18.1	7.5	4.5
70°	330.3	138.8	12.1	4.5	3.0
72.5°	273.0	89.0	7.5	3.0	1.5
75°	217.2	46.8	3.0	1.5	1.5
77.5°	162.9	19.6	1.5	1.5	1.5
80°	111.6	9.0	1.5	1.5	0.0
82.5°	66.4	3.0	1.5	1.5	0.0
85°	25.6	0.0	0.0	0.0	0.0
87.5°	1.5	0.0	0.0	0.0	0.0
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	19.32	20.71	19.69	21.02	21.34	4.18	5.57	4.55	5.88	6.20
	3H	20.87	22.10	21.25	22.43	22.79	4.10	5.33	4.48	5.66	6.02
	4H	21.40	22.54	21.80	22.89	23.27	4.04	5.18	4.44	5.53	5.91
	6H	21.73	22.79	22.15	23.15	23.55	3.97	5.02	4.38	5.39	5.78
	8H	21.82	22.81	22.24	23.20	23.61	3.93	4.92	4.36	5.31	5.72
	12H	21.83	22.79	22.26	23.17	23.60	3.89	4.84	4.32	5.22	5.65
4H	2H	19.13	20.27	19.53	20.62	21.00	5.05	6.19	5.45	6.54	6.92
	3H	20.74	21.67	21.15	22.08	22.48	5.00	5.93	5.41	6.33	6.73
	4H	21.26	22.10	21.70	22.51	22.96	4.92	5.75	5.35	6.17	6.61
	6H	21.64	22.36	22.10	22.80	23.27	4.85	5.57	5.31	6.02	6.48
	8H	21.74	22.41	22.20	22.85	23.32	4.80	5.47	5.27	5.92	6.39
	12H	21.77	22.36	22.26	22.85	23.32	4.76	5.35	5.24	5.83	6.31
8H	4H	21.13	21.81	21.60	22.25	22.72	5.94	6.61	6.41	7.06	7.53
	6H	21.49	22.04	21.99	22.53	23.01	5.86	6.41	6.36	6.90	7.38
	8H	21.58	22.08	22.11	22.59	23.08	5.81	6.30	6.33	6.81	7.30
	12H	21.63	22.06	22.14	22.56	23.13	5.76	6.20	6.28	6.69	7.26
12H	4H	21.09	21.69	21.58	22.17	22.64	6.02	6.61	6.50	7.09	7.57
	6H	21.43	21.92	21.95	22.44	22.93	5.92	6.41	6.44	6.93	7.42
	8H	21.54	21.98	22.06	22.47	23.04	5.89	6.32	6.40	6.82	7.39