

Scaled data based on original data using  
LM-79-2019 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-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
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-FLL-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: -

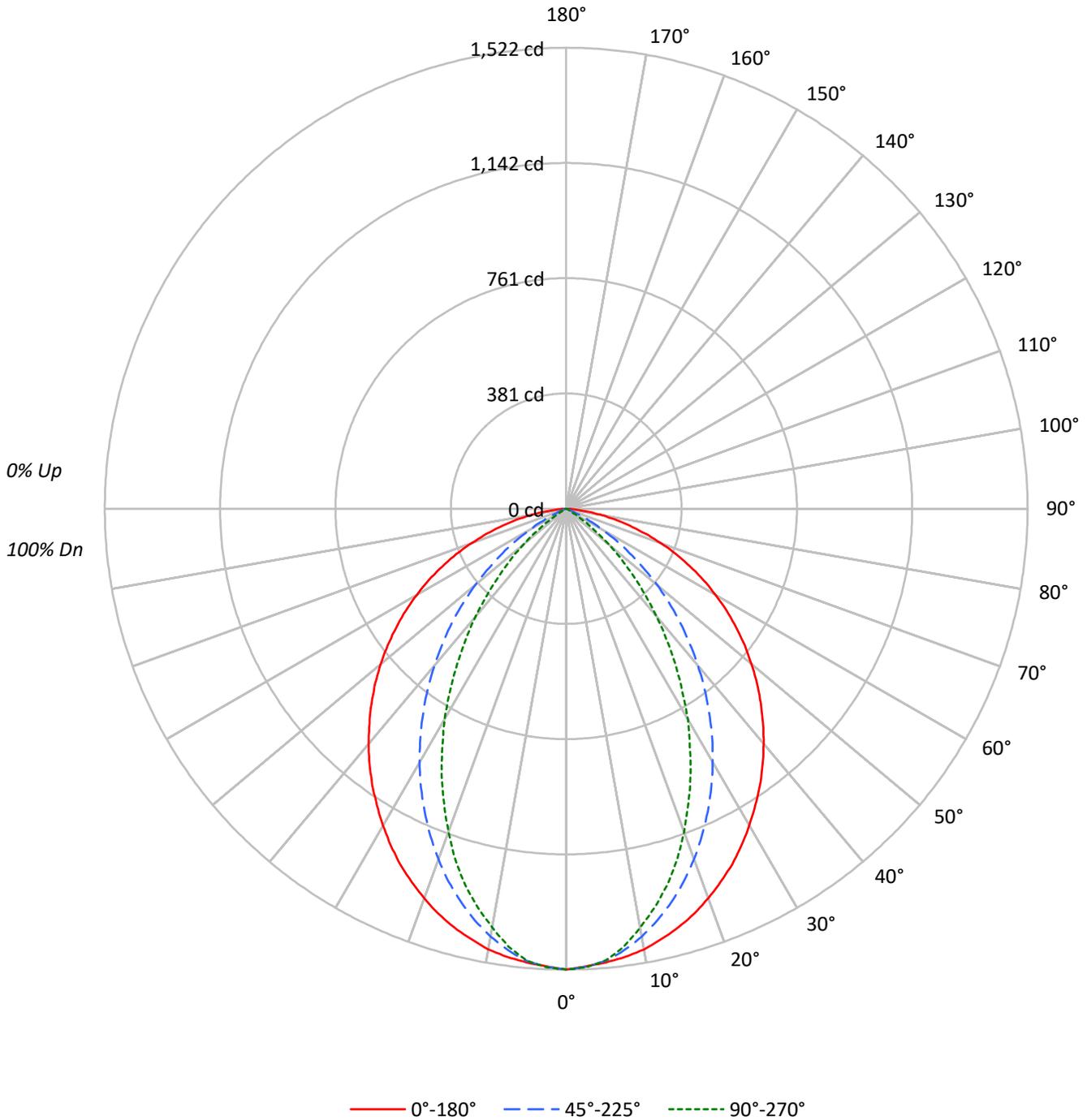
**Summary**

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

TEST NUMBER: P1056388

CATALOG NUMBER: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1056388

CATALOG NUMBER: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-B

**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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78				78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69				69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61				61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55				55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49				49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45				45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34				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



TEST NUMBER: P1056388

CATALOG NUMBER: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-B

**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	



TEST NUMBER: P1056388

CATALOG NUMBER: S125R3DR-S1270D835-X4F0-XX-UDD-FLL-B

**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

(END OF REPORT)