

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: P1056385

Luminaire Tested: S125R3DR-S1270D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056385  
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-S1270D830-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

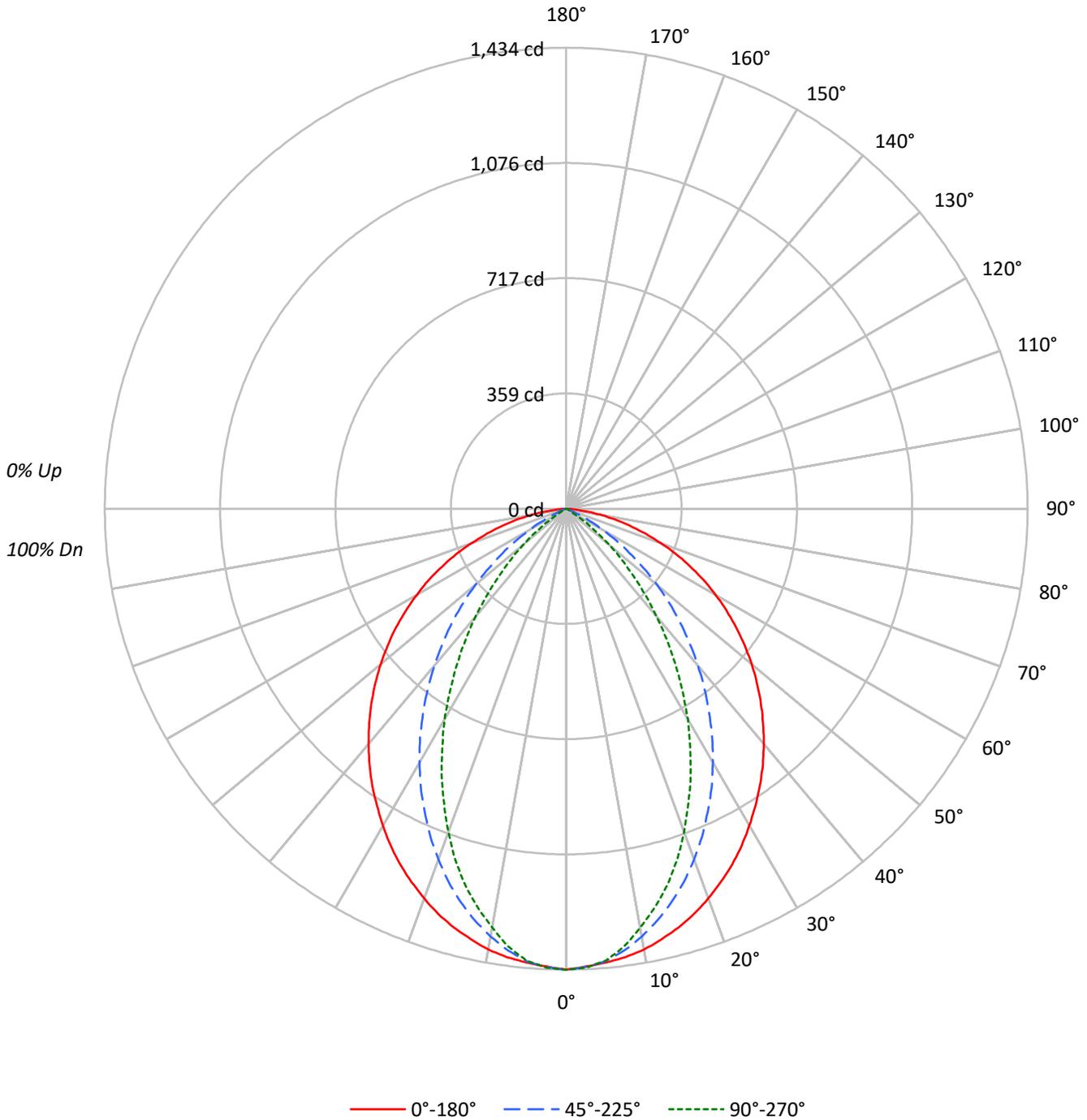
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2324.8 lumens  
Efficiency: N/A  
Efficacy: 55.5 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: P1056385

CATALOG NUMBER: S125R3DR-S1270D830-X4F0-XX-UDD-FLL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1056385

CATALOG NUMBER: S125R3DR-S1270D830-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	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°	10140	10140	10140
5°	10057	10027	10017
10°	10000	9704	9500
15°	9873	9270	8874
20°	9710	8737	8053
25°	9525	8116	7140
30°	9294	7438	6173
35°	9066	6686	5103
40°	8815	5877	4040
45°	8555	5017	2927
50°	8270	4049	1892
55°	7955	2960	841
60°	7577	1830	242
65°	7109	666	142
70°	6434	236	58
75°	5591	76	38
80°	4283	57	0
85°	1963	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8555 cd/sqm



TEST NUMBER: P1056385

CATALOG NUMBER: S125R3DR-S1270D830-X4F0-XX-UDD-FLL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.2	5.7
10°-20°	357.7	15.4
20°-30°	483.9	20.8
30°-40°	497.1	21.4
40°-50°	411.9	17.7
50°-60°	264.4	11.4
60°-70°	127.7	5.5
70°-80°	43.2	1.9
80°-90°	5.5	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°	974.9	41.9
0°-40°	1472.0	63.3
0°-60°	2148.3	92.4
0°-90°	2324.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2324.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1417	1429	1413	1404	1412	135
15°	1349	1332	1267	1222	1212	380
25°	1221	1161	1040	947	915	562
35°	1050	950	775	640	591	657
45°	856	715	502	347	293	660
55°	645	473	240	105	68	577
65°	425	234	40	11	8	420
75°	205	44	3	1	1	217
85°	24	0	0	0	0	38
90°	0	0	0	0	0	



TEST NUMBER: P1056385

CATALOG NUMBER: S125R3DR-S1270D830-X4F0-XX-UDD-FLL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1434.3	1434.3	1434.3	1434.3	1434.3
2.5°	1425.8	1437.1	1427.2	1425.8	1428.6
5°	1417.2	1428.6	1413.0	1404.4	1411.6
7.5°	1407.3	1413.0	1386.0	1371.7	1374.6
10°	1393.1	1391.6	1351.8	1327.7	1323.4
12.5°	1371.7	1364.6	1312.0	1277.9	1270.8
15°	1349.0	1331.9	1266.6	1222.5	1212.5
17.5°	1322.0	1295.0	1216.8	1159.9	1145.7
20°	1290.7	1253.8	1161.4	1091.7	1070.4
22.5°	1256.6	1209.7	1103.1	1020.6	992.2
25°	1221.1	1161.4	1040.5	946.7	915.4
27.5°	1181.3	1111.6	978.0	871.4	833.0
30°	1138.6	1059.0	911.2	794.6	756.2
32.5°	1094.6	1006.4	844.4	717.9	670.9
35°	1050.5	949.6	774.7	639.7	591.3
37.5°	1003.6	892.7	706.5	565.8	513.2
40°	955.2	834.4	636.8	489.0	437.8
42.5°	905.5	774.7	567.2	416.5	363.9
45°	855.7	715.0	501.8	346.8	292.8
47.5°	804.6	653.9	433.6	278.6	231.7
50°	752.0	594.2	368.2	217.5	172.0
52.5°	699.4	533.1	301.4	157.8	116.6
55°	645.4	473.4	240.2	105.2	68.2
57.5°	591.3	412.2	183.4	58.3	25.6
60°	535.9	354.0	129.4	19.9	17.1
62.5°	481.9	291.4	81.0	15.6	12.8
65°	425.0	234.5	39.8	11.4	8.5
67.5°	369.6	180.5	17.1	7.1	4.3
70°	311.3	130.8	11.4	4.3	2.8
72.5°	257.3	83.9	7.1	2.8	1.4
75°	204.7	44.1	2.8	1.4	1.4
77.5°	153.5	18.5	1.4	1.4	1.4
80°	105.2	8.5	1.4	1.4	0.0
82.5°	62.5	2.8	1.4	1.4	0.0
85°	24.2	0.0	0.0	0.0	0.0
87.5°	1.4	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)