

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: P1056358

Luminaire Tested: S125R3DR-S1090D830-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056358  
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-S1090D830-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: -

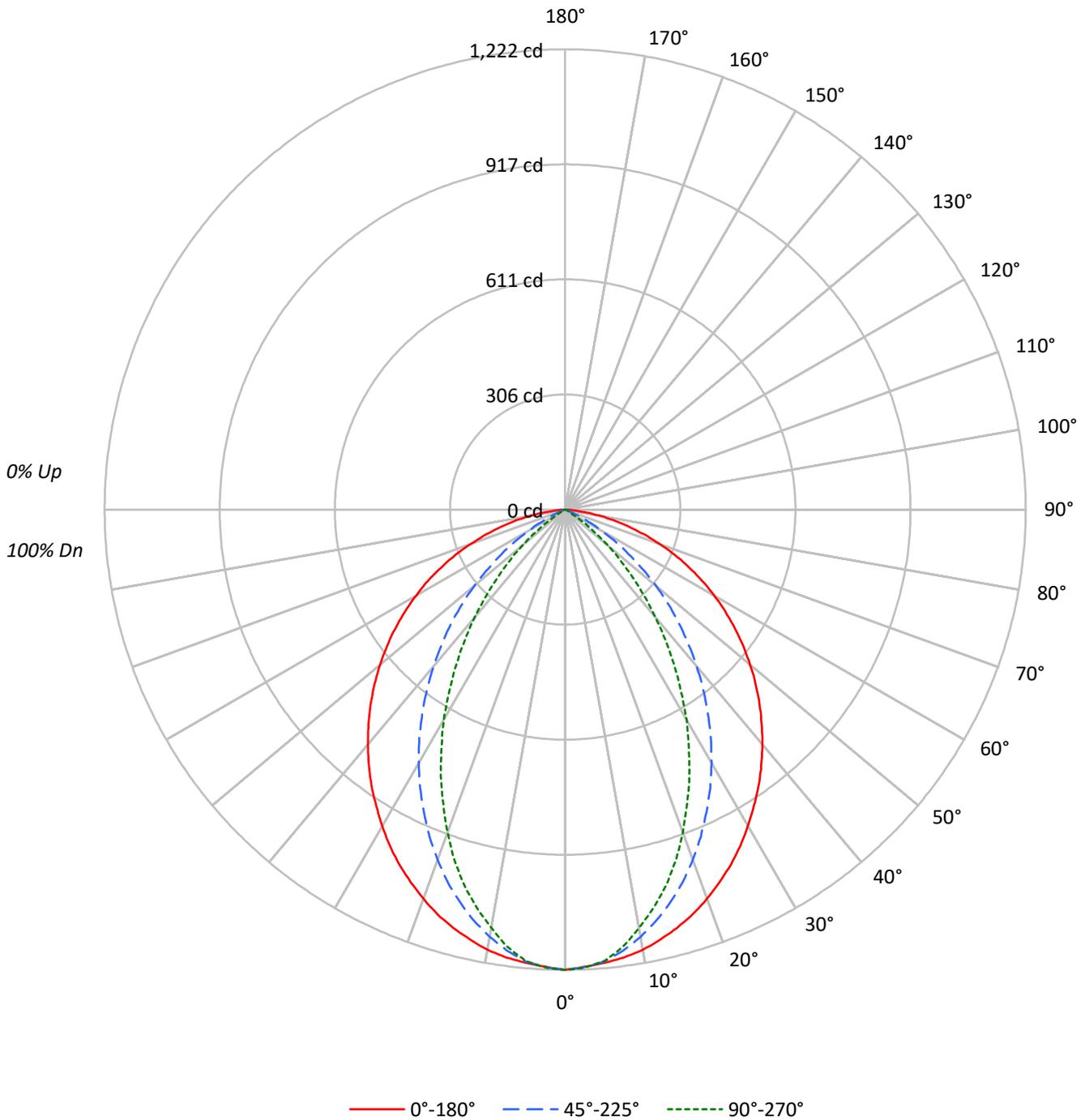
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1980.9 lumens  
Efficiency: N/A  
Efficacy: 57.1 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): 34.7  
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	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°	8639	8639	8639
5°	8570	8544	8535
10°	8521	8269	8095
15°	8413	7898	7562
20°	8274	7445	6862
25°	8115	6916	6084
30°	7920	6338	5260
35°	7725	5697	4349
40°	7511	5007	3443
45°	7290	4275	2494
50°	7046	3450	1612
55°	6778	2523	716
60°	6456	1558	205
65°	6059	567	122
70°	5484	200	50
75°	4764	66	33
80°	3648	49	0
85°	1671	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7290 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.5	5.7
10°-20°	304.8	15.4
20°-30°	412.4	20.8
30°-40°	423.6	21.4
40°-50°	350.9	17.7
50°-60°	225.3	11.4
60°-70°	108.8	5.5
70°-80°	36.8	1.9
80°-90°	4.7	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°	830.7	41.9
0°-40°	1254.3	63.3
0°-60°	1830.5	92.4
0°-90°	1980.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1222	1222	1222	1222	1222	
5°	1208	1217	1204	1197	1203	115
15°	1150	1135	1079	1042	1033	324
25°	1040	990	887	807	780	479
35°	895	809	660	545	504	560
45°	729	609	428	296	250	562
55°	550	403	205	90	58	491
65°	362	200	34	10	7	358
75°	174	38	2	1	1	185
85°	21	0	0	0	0	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1222.1	1222.1	1222.1	1222.1	1222.1
2.5°	1214.9	1224.6	1216.1	1214.9	1217.3
5°	1207.6	1217.3	1204.0	1196.7	1202.8
7.5°	1199.1	1204.0	1180.9	1168.8	1171.3
10°	1187.0	1185.8	1151.9	1131.3	1127.7
12.5°	1168.8	1162.8	1118.0	1088.9	1082.8
15°	1149.5	1134.9	1079.2	1041.7	1033.2
17.5°	1126.4	1103.4	1036.8	988.4	976.3
20°	1099.8	1068.3	989.6	930.2	912.1
22.5°	1070.7	1030.8	939.9	869.7	845.4
25°	1040.4	989.6	886.6	806.7	780.0
27.5°	1006.5	947.2	833.3	742.5	709.8
30°	970.2	902.4	776.4	677.1	644.4
32.5°	932.6	857.6	719.5	611.7	571.7
35°	895.1	809.1	660.1	545.1	503.9
37.5°	855.1	760.7	602.0	482.1	437.3
40°	813.9	711.0	542.6	416.7	373.1
42.5°	771.6	660.1	483.3	354.9	310.1
45°	729.2	609.2	427.6	295.5	249.5
47.5°	685.6	557.2	369.4	237.4	197.4
50°	640.7	506.3	313.7	185.3	146.6
52.5°	595.9	454.2	256.8	134.4	99.3
55°	549.9	403.3	204.7	89.6	58.1
57.5°	503.9	351.3	156.2	49.7	21.8
60°	456.6	301.6	110.2	17.0	14.5
62.5°	410.6	248.3	69.0	13.3	10.9
65°	362.2	199.9	33.9	9.7	7.3
67.5°	314.9	153.8	14.5	6.1	3.6
70°	265.3	111.4	9.7	3.6	2.4
72.5°	219.2	71.5	6.1	2.4	1.2
75°	174.4	37.5	2.4	1.2	1.2
77.5°	130.8	15.7	1.2	1.2	1.2
80°	89.6	7.3	1.2	1.2	0.0
82.5°	53.3	2.4	1.2	1.2	0.0
85°	20.6	0.0	0.0	0.0	0.0
87.5°	1.2	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)