

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: P1056379

Luminaire Tested: S125R3DR-S1090D940-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056379  
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-S1090D940-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

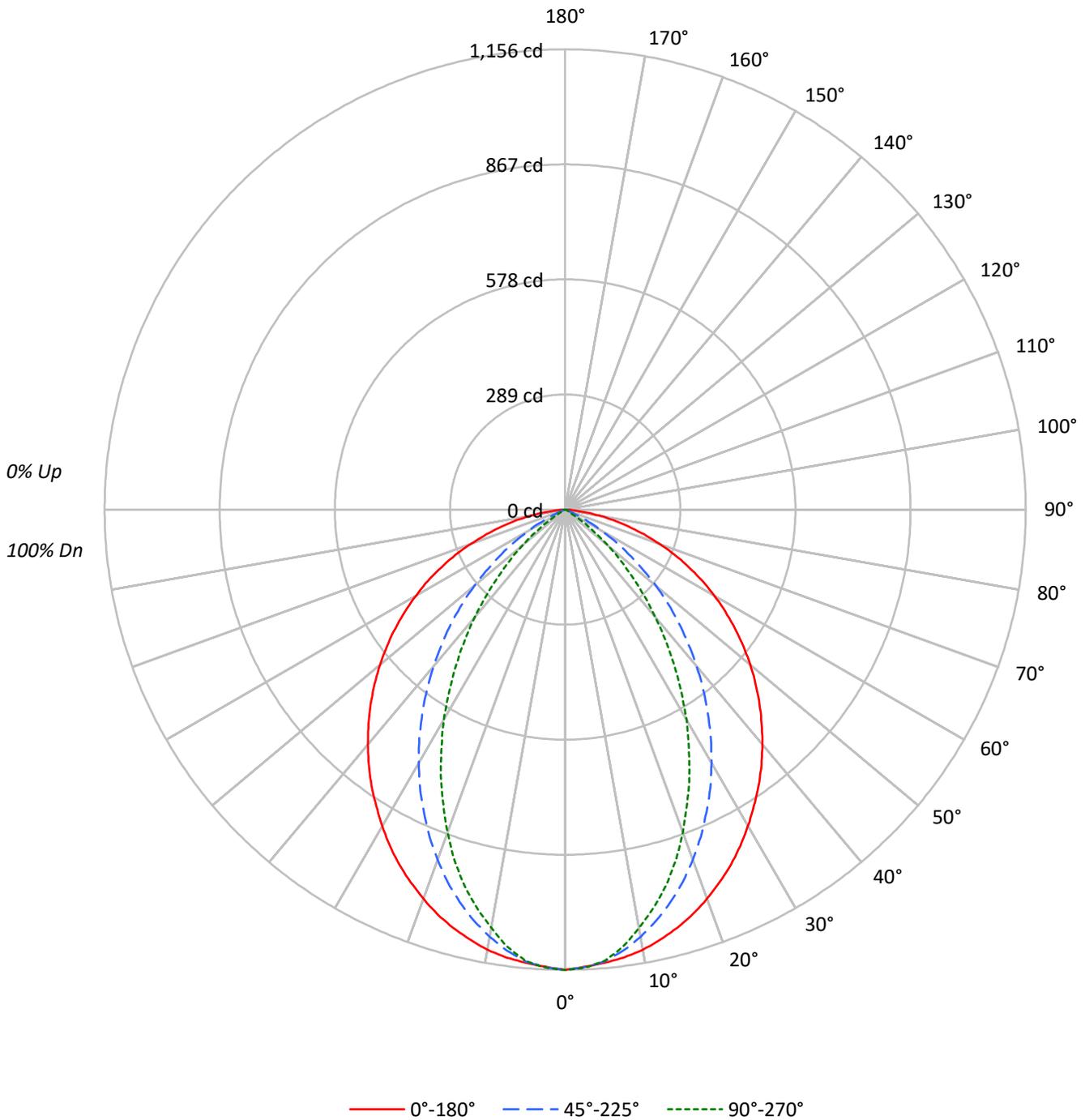
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1874.0 lumens  
Efficiency: N/A  
Efficacy: 54.0 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	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°	8174	8174	8174
5°	8108	8083	8075
10°	8061	7823	7658
15°	7959	7472	7154
20°	7828	7043	6492
25°	7678	6543	5757
30°	7493	5996	4976
35°	7308	5389	4114
40°	7107	4738	3257
45°	6896	4044	2360
50°	6667	3264	1525
55°	6411	2387	678
60°	6108	1475	195
65°	5731	537	115
70°	5188	190	48
75°	4507	63	30
80°	3452	45	0
85°	1582	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6896 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.4	5.7
10°-20°	288.4	15.4
20°-30°	390.1	20.8
30°-40°	400.8	21.4
40°-50°	332.0	17.7
50°-60°	213.2	11.4
60°-70°	103.0	5.5
70°-80°	34.8	1.9
80°-90°	4.5	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°	785.9	41.9
0°-40°	1186.6	63.3
0°-60°	1731.8	92.4
0°-90°	1874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1156	1156	1156	1156	1156	
5°	1142	1152	1139	1132	1138	108
15°	1088	1074	1021	986	978	306
25°	984	936	839	763	738	453
35°	847	766	624	516	477	529
45°	690	576	404	280	236	532
55°	520	382	194	85	55	465
65°	343	189	32	9	7	339
75°	165	36	2	1	1	175
85°	20	0	0	0	0	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1156.2	1156.2	1156.2	1156.2	1156.2
2.5°	1149.3	1158.5	1150.5	1149.3	1151.6
5°	1142.5	1151.6	1139.0	1132.2	1137.9
7.5°	1134.4	1139.0	1117.3	1105.8	1108.1
10°	1123.0	1121.8	1089.8	1070.3	1066.8
12.5°	1105.8	1100.1	1057.7	1030.2	1024.4
15°	1087.5	1073.7	1021.0	985.5	977.5
17.5°	1065.7	1043.9	980.9	935.1	923.6
20°	1040.5	1010.7	936.2	880.1	862.9
22.5°	1013.0	975.2	889.2	822.8	799.8
25°	984.3	936.2	838.8	763.2	738.0
27.5°	952.2	896.1	788.4	702.4	671.5
30°	917.9	853.7	734.5	640.6	609.6
32.5°	882.3	811.3	680.7	578.7	540.9
35°	846.8	765.5	624.5	515.7	476.7
37.5°	809.0	719.6	569.5	456.1	413.7
40°	770.1	672.6	513.4	394.2	352.9
42.5°	729.9	624.5	457.2	335.8	293.4
45°	689.8	576.4	404.5	279.6	236.1
47.5°	648.6	527.1	349.5	224.6	186.8
50°	606.2	479.0	296.8	175.3	138.7
52.5°	563.8	429.7	242.9	127.2	94.0
55°	520.2	381.6	193.7	84.8	55.0
57.5°	476.7	332.3	147.8	47.0	20.6
60°	432.0	285.3	104.3	16.0	13.8
62.5°	388.5	234.9	65.3	12.6	10.3
65°	342.6	189.1	32.1	9.2	6.9
67.5°	297.9	145.5	13.8	5.7	3.4
70°	251.0	105.4	9.2	3.4	2.3
72.5°	207.4	67.6	5.7	2.3	1.1
75°	165.0	35.5	2.3	1.1	1.1
77.5°	123.8	14.9	1.1	1.1	1.1
80°	84.8	6.9	1.1	1.1	0.0
82.5°	50.4	2.3	1.1	1.1	0.0
85°	19.5	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)