

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: P1056380

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
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-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

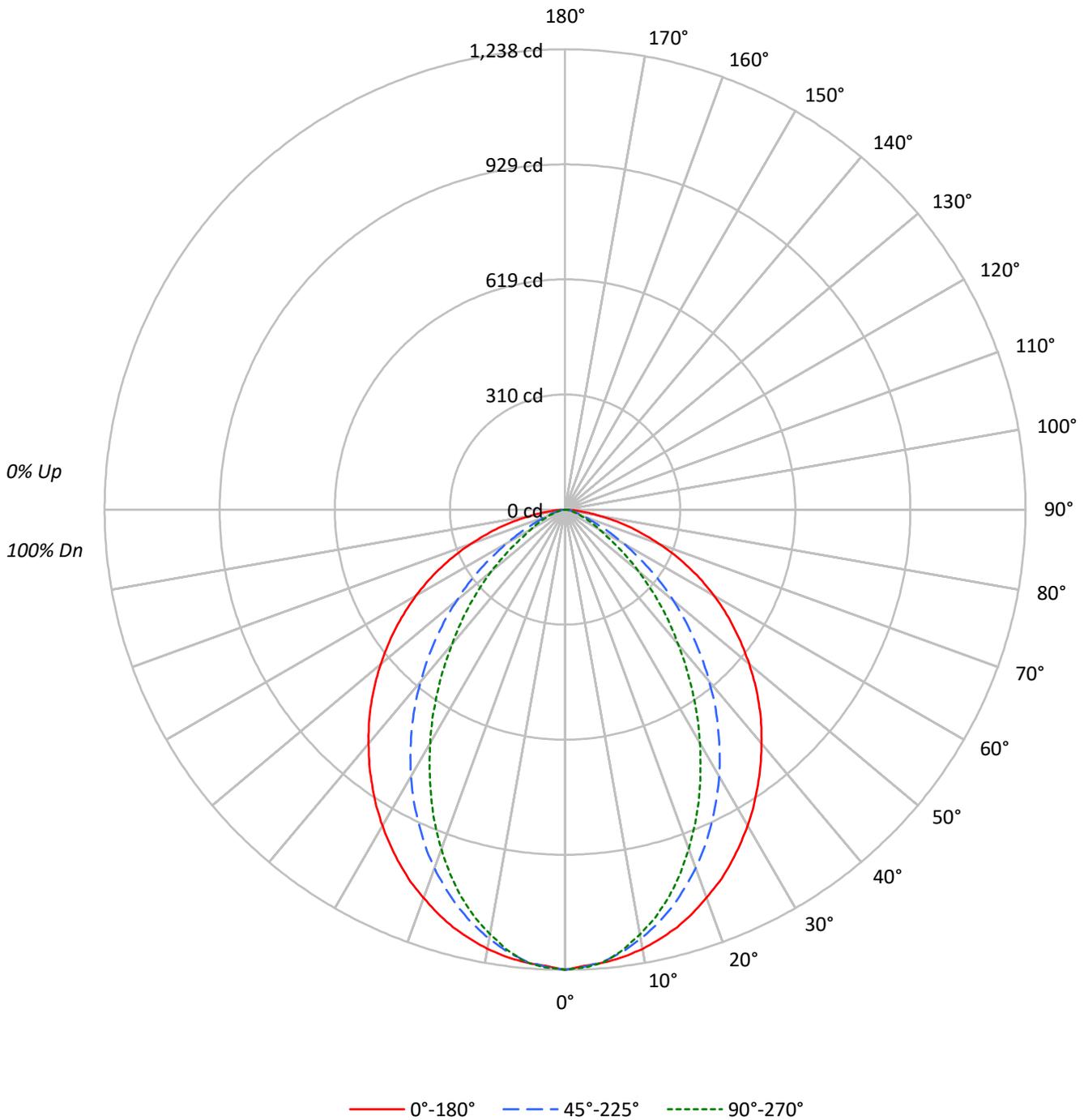
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2236.8 lumens  
Efficiency: N/A  
Efficacy: 64.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				

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

	0°	45°	90°
0°	8749	8749	8749
5°	8677	8652	8668
10°	8613	8415	8325
15°	8512	8110	7892
20°	8362	7724	7310
25°	8205	7267	6650
30°	8016	6763	5921
35°	7802	6190	5152
40°	7582	5562	4357
45°	7366	4903	3609
50°	7108	4172	2835
55°	6835	3389	2062
60°	6529	2528	1475
65°	6134	1668	1151
70°	5541	1160	806
75°	4821	751	625
80°	3778	562	513
85°	1955	462	373

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7366 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.3	5.2
10°-20°	313.4	14.0
20°-30°	433.3	19.4
30°-40°	459.1	20.5
40°-50°	400.7	17.9
50°-60°	285.0	12.7
60°-70°	158.5	7.1
70°-80°	60.9	2.7
80°-90°	10.6	0.5
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°	862.0	38.5
0°-40°	1321.1	59.1
0°-60°	2006.8	89.7
0°-90°	2236.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2236.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1223	1232	1219	1216	1222	116
15°	1163	1153	1108	1084	1078	328
25°	1052	1016	932	874	853	484
35°	904	842	717	630	597	566
45°	737	649	490	392	361	568
55°	555	445	275	190	167	496
65°	367	241	100	73	69	362
75°	176	69	28	23	23	187
85°	24	7	6	5	5	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1237.6	1237.6	1237.6	1237.6	1237.6
2.5°	1228.4	1241.0	1230.7	1231.8	1233.0
5°	1222.7	1231.8	1219.2	1215.8	1221.5
7.5°	1213.5	1220.4	1198.6	1190.6	1194.0
10°	1199.8	1202.1	1172.3	1160.8	1159.7
12.5°	1182.6	1179.1	1142.5	1124.1	1123.0
15°	1163.1	1152.8	1108.1	1084.0	1078.3
17.5°	1139.0	1123.0	1068.0	1037.0	1027.9
20°	1111.5	1089.8	1026.7	986.6	971.7
22.5°	1084.0	1054.2	980.9	930.5	914.4
25°	1051.9	1016.4	931.6	874.3	852.6
27.5°	1017.6	975.2	881.2	814.7	788.4
30°	982.0	932.8	828.5	754.0	725.4
32.5°	944.2	888.1	773.5	692.1	662.3
35°	904.1	842.2	717.3	630.2	597.0
37.5°	864.0	795.3	662.3	569.5	535.1
40°	821.6	747.1	602.7	507.6	472.1
42.5°	780.4	697.9	546.6	449.2	417.1
45°	736.8	648.6	490.4	391.9	361.0
47.5°	692.1	597.0	434.3	338.0	307.1
50°	646.3	546.6	379.3	285.3	257.8
52.5°	600.5	496.2	327.7	234.9	210.8
55°	554.6	444.6	275.0	190.2	167.3
57.5°	508.8	394.2	225.7	149.0	128.3
60°	461.8	342.6	178.8	110.0	104.3
62.5°	414.8	292.2	138.7	90.5	85.9
65°	366.7	240.6	99.7	73.3	68.8
67.5°	318.6	193.7	72.2	56.1	52.7
70°	268.1	147.8	56.1	42.4	39.0
72.5°	220.0	106.6	40.1	30.9	29.8
75°	176.5	68.8	27.5	22.9	22.9
77.5°	132.9	41.3	19.5	17.2	17.2
80°	92.8	24.1	13.8	12.6	12.6
82.5°	56.1	12.6	9.2	8.0	8.0
85°	24.1	6.9	5.7	4.6	4.6
87.5°	4.6	2.3	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)