

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: P1056381

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056381  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
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-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

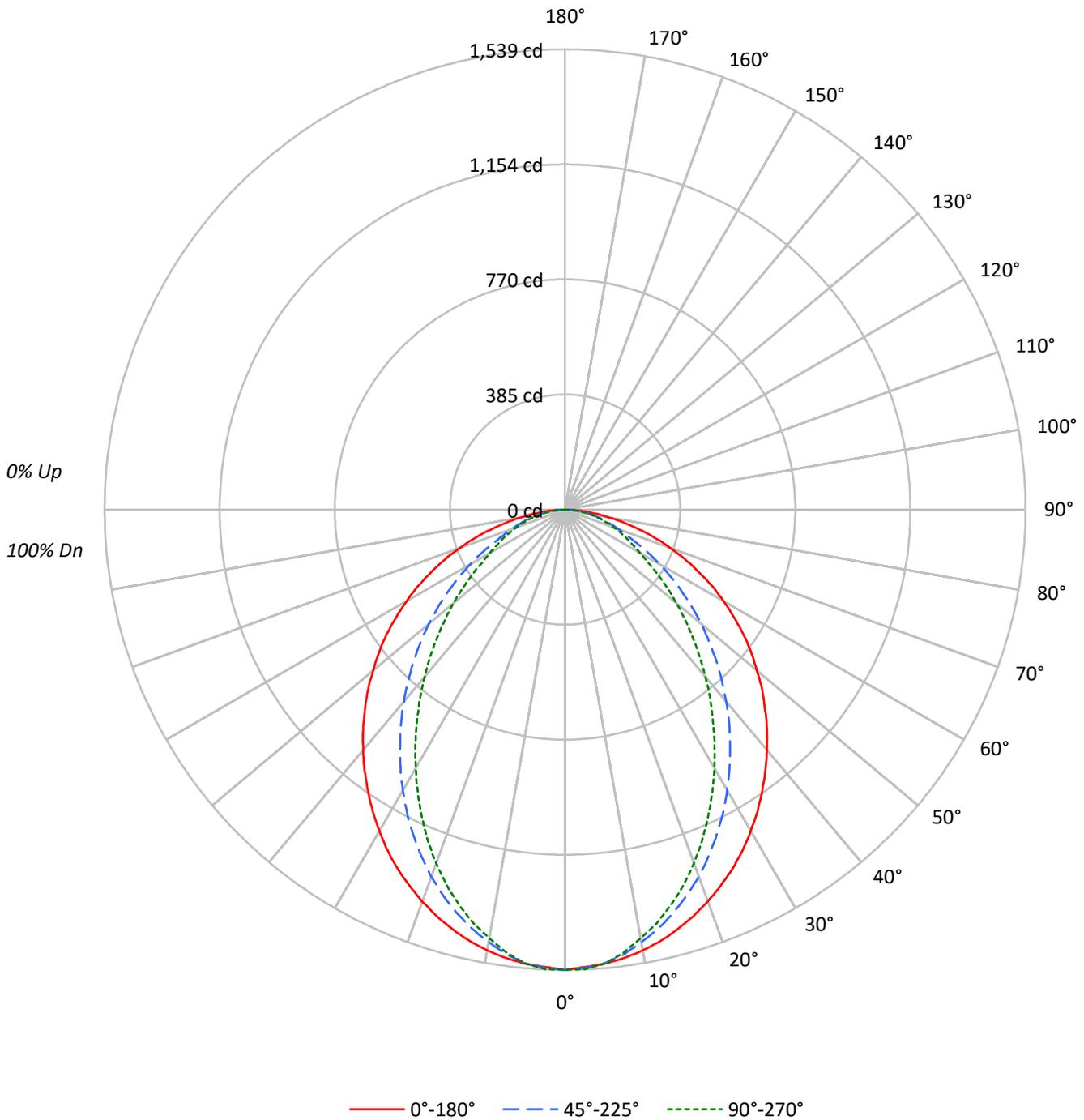
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3261.8 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28				

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

	0°	45°	90°
0°	10880	10880	10880
5°	10816	10807	10816
10°	10743	10546	10447
15°	10634	10224	10013
20°	10492	9827	9475
25°	10333	9359	8831
30°	10130	8849	8147
35°	9909	8297	7437
40°	9686	7731	6736
45°	9452	7137	6038
50°	9200	6528	5344
55°	8969	5862	4647
60°	8651	5152	4083
65°	8223	4371	3795
70°	7722	3909	3553
75°	6979	3600	3349
80°	6066	3265	3127
85°	4737	2879	2879

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9452 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.0	4.4
10°-20°	395.4	12.1
20°-30°	558.5	17.1
30°-40°	614.8	18.8
40°-50°	573.5	17.6
50°-60°	457.8	14.0
60°-70°	308.1	9.4
70°-80°	164.1	5.0
80°-90°	45.6	1.4
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°	1097.8	33.7
0°-40°	1712.7	52.5
0°-60°	2744.0	84.1
0°-90°	3261.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3261.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1524	1537	1523	1518	1524	145
15°	1453	1445	1397	1373	1368	410
25°	1325	1285	1200	1147	1132	610
35°	1148	1081	961	886	862	718
45°	945	856	714	627	604	730
55°	728	618	476	400	377	650
65°	492	384	261	232	227	488
75°	256	170	132	124	123	272
85°	58	40	36	37	36	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1530.9	1543.5	1533.2	1535.5	1537.8
5°	1524.1	1536.7	1522.9	1518.3	1524.1
7.5°	1512.6	1522.9	1500.0	1489.7	1494.3
10°	1496.6	1503.4	1469.1	1455.3	1455.3
12.5°	1477.1	1477.1	1435.8	1416.3	1416.3
15°	1453.0	1445.0	1396.9	1372.8	1368.2
17.5°	1425.5	1410.6	1353.3	1322.4	1316.6
20°	1394.6	1370.5	1306.3	1266.2	1259.4
22.5°	1360.2	1329.3	1254.8	1205.5	1197.5
25°	1324.7	1284.6	1199.8	1147.1	1132.2
27.5°	1284.6	1236.4	1143.6	1084.0	1065.7
30°	1241.0	1186.0	1084.0	1017.6	998.1
32.5°	1196.3	1134.4	1023.3	952.2	930.5
35°	1148.2	1080.6	961.4	885.8	861.7
37.5°	1100.1	1026.7	900.7	821.6	796.4
40°	1049.6	969.4	837.7	756.3	729.9
42.5°	999.2	913.3	775.8	693.3	665.8
45°	945.4	856.0	713.9	626.8	603.9
47.5°	893.8	797.6	653.2	568.4	543.2
50°	836.5	736.8	593.6	508.8	485.9
52.5°	783.8	677.2	534.0	454.9	430.9
55°	727.7	617.6	475.6	399.9	377.0
57.5°	669.2	558.1	419.4	348.4	326.6
60°	611.9	498.5	364.4	299.1	288.8
62.5°	553.5	442.3	312.8	262.4	255.5
65°	491.6	383.9	261.3	231.5	226.9
67.5°	433.2	327.7	220.0	202.8	198.2
70°	373.6	271.6	189.1	174.2	171.9
72.5°	315.1	217.7	159.3	149.0	146.7
75°	255.5	169.6	131.8	123.8	122.6
77.5°	200.5	127.2	104.3	100.8	98.5
80°	149.0	95.1	80.2	77.9	76.8
82.5°	102.0	65.3	57.3	57.3	55.0
85°	58.4	40.1	35.5	36.7	35.5
87.5°	21.8	17.2	16.0	17.2	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)