

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: P1056365

Luminaire Tested: S125R3DR-S1090D840-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056365  
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-S1090D840-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, 80 CRI LEDS  
Ballast/Driver: -

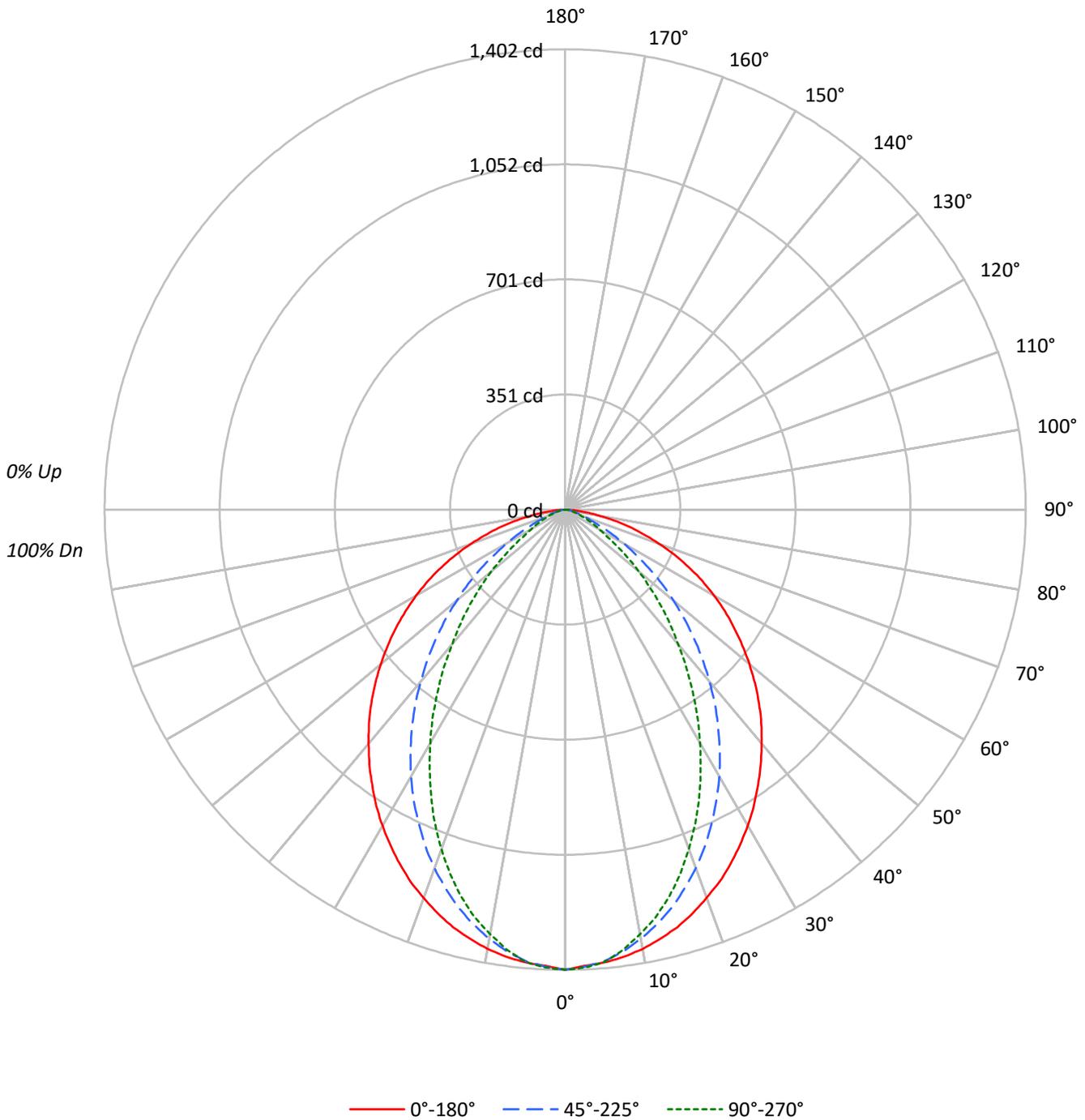
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2533.2 lumens  
Efficiency: N/A  
Efficacy: 73.0 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				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

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

	0°	45°	90°
0°	9908	9908	9908
5°	9826	9799	9817
10°	9753	9530	9427
15°	9640	9184	8938
20°	9470	8748	8279
25°	9292	8230	7531
30°	9079	7659	6706
35°	8836	7011	5835
40°	8587	6299	4934
45°	8342	5553	4087
50°	8049	4725	3211
55°	7741	3839	2336
60°	7395	2862	1670
65°	6947	1889	1303
70°	6277	1315	912
75°	5460	849	710
80°	4279	635	582
85°	2214	527	422

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8342 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	5.2
10°-20°	354.9	14.0
20°-30°	490.8	19.4
30°-40°	519.9	20.5
40°-50°	453.8	17.9
50°-60°	322.8	12.7
60°-70°	179.5	7.1
70°-80°	69.0	2.7
80°-90°	12.0	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°	976.2	38.5
0°-40°	1496.2	59.1
0°-60°	2272.8	89.7
0°-90°	2533.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2533.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1402	1402	1402	1402	1402	
5°	1385	1395	1381	1377	1383	131
15°	1317	1306	1255	1228	1221	371
25°	1191	1151	1055	990	966	548
35°	1024	954	812	714	676	641
45°	834	734	555	444	409	643
55°	628	504	312	215	190	562
65°	415	272	113	83	78	410
75°	200	78	31	26	26	212
85°	27	8	6	5	5	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1391.2	1405.5	1393.8	1395.1	1396.4
5°	1384.7	1395.1	1380.8	1376.9	1383.4
7.5°	1374.3	1382.1	1357.4	1348.4	1352.2
10°	1358.7	1361.3	1327.6	1314.6	1313.3
12.5°	1339.3	1335.4	1293.8	1273.1	1271.8
15°	1317.2	1305.5	1254.9	1227.7	1221.2
17.5°	1290.0	1271.8	1209.5	1174.5	1164.1
20°	1258.8	1234.2	1162.8	1117.4	1100.5
22.5°	1227.7	1193.9	1110.9	1053.8	1035.6
25°	1191.3	1151.1	1055.1	990.2	965.5
27.5°	1152.4	1104.4	998.0	922.7	892.8
30°	1112.2	1056.4	938.3	853.9	821.5
32.5°	1069.3	1005.8	876.0	783.8	750.1
35°	1023.9	953.8	812.4	713.8	676.1
37.5°	978.5	900.6	750.1	645.0	606.0
40°	930.5	846.1	682.6	574.9	534.7
42.5°	883.8	790.3	619.0	508.7	472.4
45°	834.4	734.5	555.4	443.8	408.8
47.5°	783.8	676.1	491.8	382.8	347.8
50°	731.9	619.0	429.6	323.1	292.0
52.5°	680.0	561.9	371.2	266.0	238.8
55°	628.1	503.5	311.5	215.4	189.5
57.5°	576.2	446.4	255.7	168.7	145.3
60°	523.0	388.0	202.4	124.6	118.1
62.5°	469.8	330.9	157.0	102.5	97.3
65°	415.3	272.5	112.9	83.1	77.9
67.5°	360.8	219.3	81.8	63.6	59.7
70°	303.7	167.4	63.6	48.0	44.1
72.5°	249.2	120.7	45.4	35.0	33.7
75°	199.9	77.9	31.1	26.0	26.0
77.5°	150.5	46.7	22.1	19.5	19.5
80°	105.1	27.3	15.6	14.3	14.3
82.5°	63.6	14.3	10.4	9.1	9.1
85°	27.3	7.8	6.5	5.2	5.2
87.5°	5.2	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)