

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: P1056361

Luminaire Tested: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

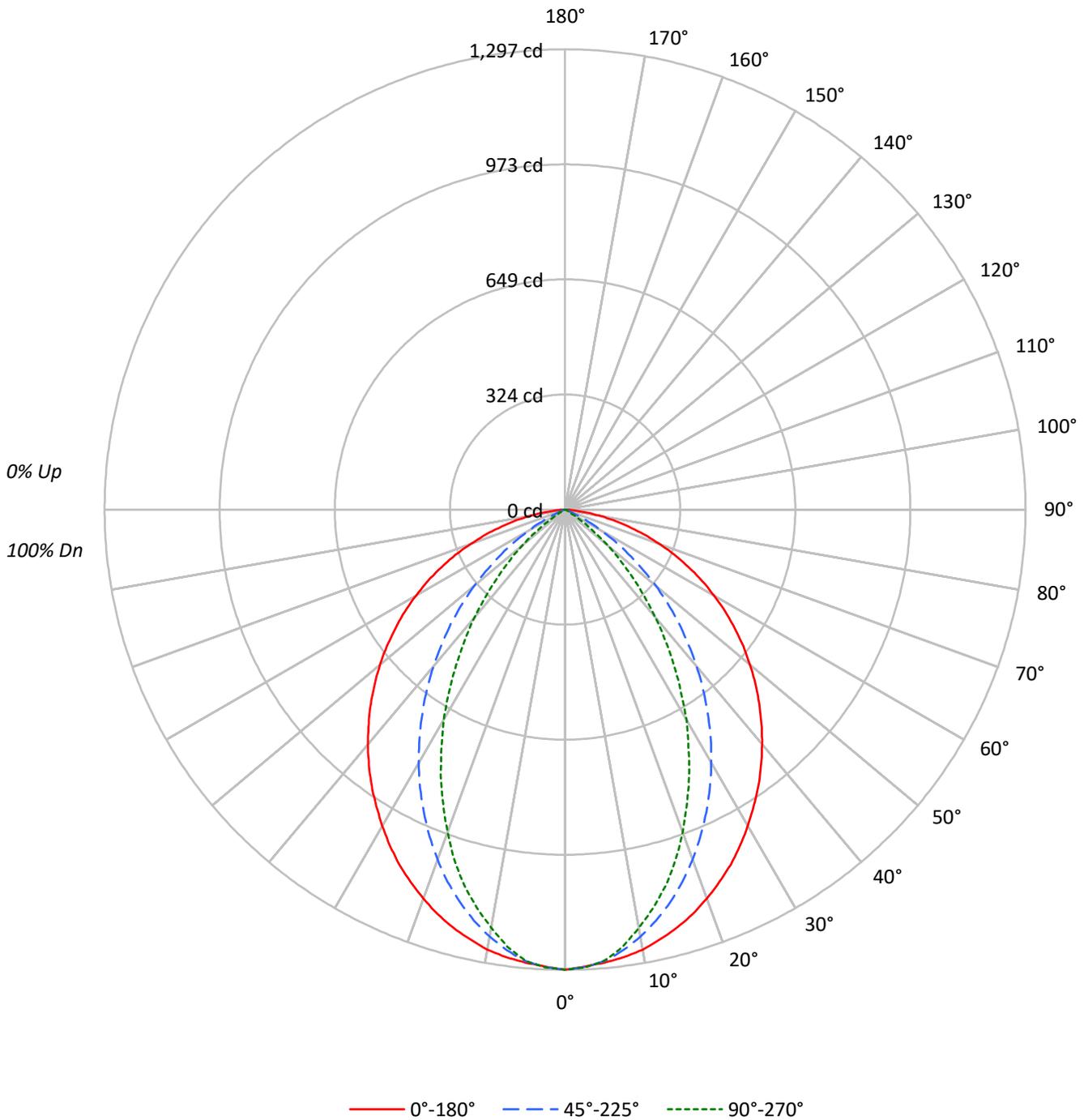
Test Method: LM-79-2019  
Report Number: P1056361  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S1090D835-X4F0-XX-UDD-FLL-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2101.6 lumens  
Efficiency: N/A  
Efficacy: 60.6 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°	9166	9166	9166
5°	9092	9065	9056
10°	9040	8773	8588
15°	8925	8380	8023
20°	8778	7898	7280
25°	8611	7338	6455
30°	8402	6724	5581
35°	8196	6044	4614
40°	7970	5313	3653
45°	7734	4535	2646
50°	7476	3660	1710
55°	7190	2677	760
60°	6850	1653	218
65°	6427	602	129
70°	5816	213	54
75°	5053	71	36
80°	3872	53	0
85°	1768	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7734 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.4	5.7
10°-20°	323.4	15.4
20°-30°	437.5	20.8
30°-40°	449.4	21.4
40°-50°	372.3	17.7
50°-60°	239.0	11.4
60°-70°	115.5	5.5
70°-80°	39.1	1.9
80°-90°	5.0	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°	881.3	41.9
0°-40°	1330.7	63.3
0°-60°	1942.1	92.4
0°-90°	2101.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2101.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1281	1292	1277	1270	1276	122
15°	1220	1204	1145	1105	1096	344
25°	1104	1050	941	856	828	508
35°	950	858	700	578	535	594
45°	774	646	454	314	265	597
55°	583	428	217	95	62	521
65°	384	212	36	10	8	380
75°	185	40	3	1	1	196
85°	22	0	0	0	0	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1288.9	1299.2	1290.2	1288.9	1291.5
5°	1281.2	1291.5	1277.4	1269.6	1276.1
7.5°	1272.2	1277.4	1252.9	1240.1	1242.7
10°	1259.4	1258.1	1222.1	1200.3	1196.4
12.5°	1240.1	1233.7	1186.1	1155.3	1148.9
15°	1219.5	1204.1	1145.0	1105.2	1096.2
17.5°	1195.1	1170.7	1100.0	1048.6	1035.8
20°	1166.8	1133.4	1049.9	986.9	967.7
22.5°	1136.0	1093.6	997.2	922.7	897.0
25°	1103.9	1049.9	940.7	855.9	827.6
27.5°	1067.9	1004.9	884.1	787.7	753.0
30°	1029.3	957.4	823.7	718.4	683.7
32.5°	989.5	909.8	763.3	649.0	606.6
35°	949.7	858.4	700.4	578.3	534.6
37.5°	907.3	807.0	638.7	511.5	463.9
40°	863.6	754.3	575.7	442.1	395.8
42.5°	818.6	700.4	512.7	376.5	329.0
45°	773.6	646.4	453.6	313.6	264.7
47.5°	727.3	591.1	391.9	251.9	209.5
50°	679.8	537.2	332.8	196.6	155.5
52.5°	632.3	481.9	272.4	142.6	105.4
55°	583.4	427.9	217.2	95.1	61.7
57.5°	534.6	372.7	165.8	52.7	23.1
60°	484.5	320.0	116.9	18.0	15.4
62.5°	435.6	263.4	73.2	14.1	11.6
65°	384.2	212.0	36.0	10.3	7.7
67.5°	334.1	163.2	15.4	6.4	3.9
70°	281.4	118.2	10.3	3.9	2.6
72.5°	232.6	75.8	6.4	2.6	1.3
75°	185.0	39.8	2.6	1.3	1.3
77.5°	138.8	16.7	1.3	1.3	1.3
80°	95.1	7.7	1.3	1.3	0.0
82.5°	56.5	2.6	1.3	1.3	0.0
85°	21.8	0.0	0.0	0.0	0.0
87.5°	1.3	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)