

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: P1056486

Luminaire Tested: S125R3DR-S850D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056486  
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-S850D935-X4F0-XX-UDD-FLL-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

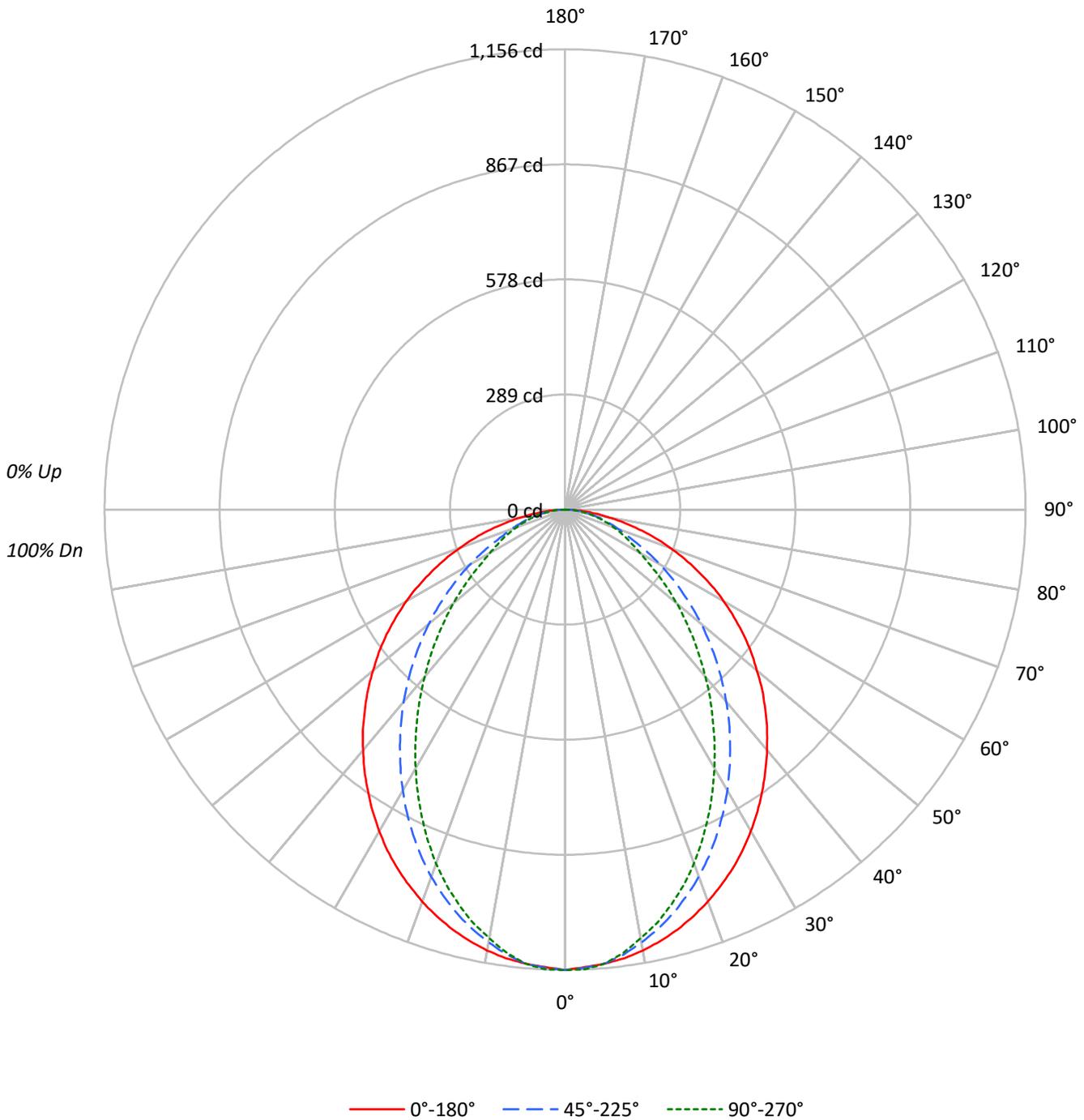
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2450.8 lumens  
Efficiency: N/A  
Efficacy: 92.8 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): 26.4  
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°	8174	8174	8174
5°	8126	8120	8126
10°	8072	7924	7850
15°	7990	7682	7524
20°	7883	7384	7118
25°	7763	7032	6636
30°	7612	6649	6121
35°	7445	6234	5588
40°	7278	5808	5062
45°	7101	5363	4536
50°	6912	4905	4015
55°	6738	4404	3492
60°	6501	3871	3068
65°	6179	3284	2852
70°	5802	2937	2668
75°	5244	2704	2516
80°	4556	2455	2349
85°	3561	2166	2166

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7101 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.2	4.4
10°-20°	297.1	12.1
20°-30°	419.6	17.1
30°-40°	462.0	18.8
40°-50°	430.9	17.6
50°-60°	344.0	14.0
60°-70°	231.5	9.4
70°-80°	123.3	5.0
80°-90°	34.3	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°	824.9	33.7
0°-40°	1286.8	52.5
0°-60°	2061.7	84.1
0°-90°	2450.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2450.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1156	1156	1156	1156	1156	
5°	1145	1155	1144	1141	1145	109
15°	1092	1086	1050	1032	1028	308
25°	995	965	902	862	851	458
35°	863	812	722	666	648	540
45°	710	643	536	471	454	548
55°	547	464	357	300	283	488
65°	369	288	196	174	170	366
75°	192	127	99	93	92	205
85°	44	30	27	28	27	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1156.3	1156.3	1156.3	1156.3	1156.3
2.5°	1150.3	1159.8	1152.0	1153.7	1155.5
5°	1145.1	1154.6	1144.3	1140.8	1145.1
7.5°	1136.5	1144.3	1127.0	1119.3	1122.7
10°	1124.5	1129.6	1103.8	1093.5	1093.5
12.5°	1109.8	1109.8	1078.8	1064.2	1064.2
15°	1091.7	1085.7	1049.6	1031.5	1028.0
17.5°	1071.1	1059.9	1016.8	993.6	989.3
20°	1047.8	1029.8	981.5	951.4	946.2
22.5°	1022.0	998.8	942.8	905.8	899.7
25°	995.3	965.2	901.5	861.9	850.7
27.5°	965.2	929.0	859.3	814.5	800.7
30°	932.5	891.1	814.5	764.6	749.9
32.5°	898.9	852.4	768.9	715.5	699.1
35°	862.7	811.9	722.4	665.6	647.5
37.5°	826.6	771.5	676.7	617.3	598.4
40°	788.7	728.4	629.4	568.3	548.5
42.5°	750.8	686.2	582.9	520.9	500.2
45°	710.3	643.2	536.4	471.0	453.7
47.5°	671.6	599.3	490.8	427.1	408.1
50°	628.5	553.6	446.0	382.3	365.1
52.5°	588.9	508.8	401.2	341.8	323.7
55°	546.7	464.1	357.3	300.5	283.3
57.5°	502.8	419.3	315.1	261.7	245.4
60°	459.8	374.5	273.8	224.7	217.0
62.5°	415.9	332.3	235.1	197.2	192.0
65°	369.4	288.4	196.3	173.9	170.5
67.5°	325.5	246.2	165.3	152.4	149.0
70°	280.7	204.1	142.1	130.9	129.1
72.5°	236.8	163.6	119.7	111.9	110.2
75°	192.0	127.4	99.0	93.0	92.1
77.5°	150.7	95.6	78.4	75.8	74.0
80°	111.9	71.5	60.3	58.5	57.7
82.5°	76.6	49.1	43.0	43.0	41.3
85°	43.9	30.1	26.7	27.6	26.7
87.5°	16.4	12.9	12.1	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)