

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: P1056469

Luminaire Tested: S125R3DR-S850D835-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056469  
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-S850D835-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: -

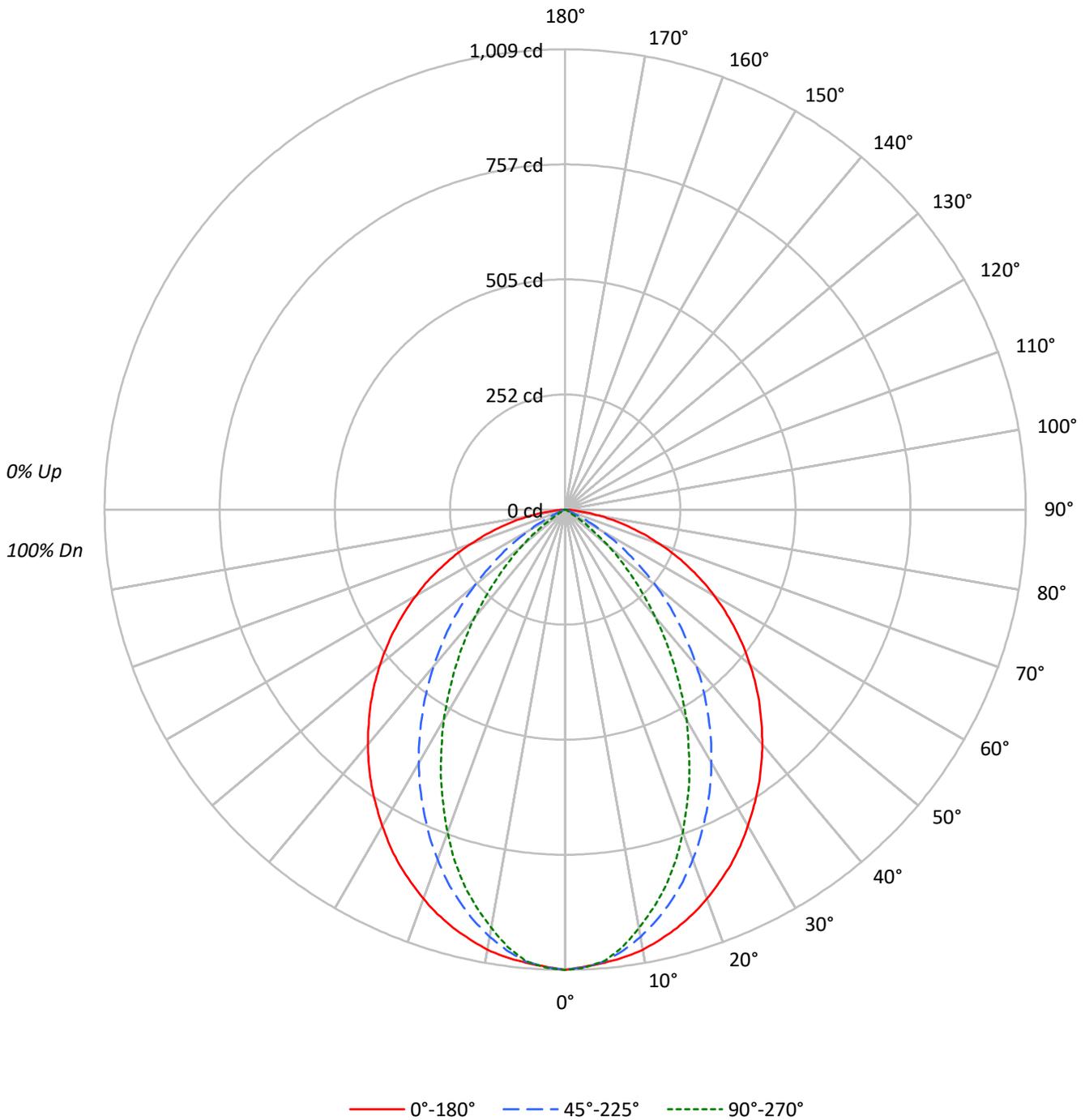
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1635.4 lumens  
Efficiency: N/A  
Efficacy: 61.9 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): 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				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°	7133	7133	7133
5°	7075	7054	7047
10°	7035	6827	6683
15°	6945	6521	6243
20°	6831	6146	5665
25°	6700	5710	5023
30°	6539	5232	4343
35°	6378	4703	3590
40°	6201	4134	2842
45°	6019	3529	2059
50°	5818	2848	1331
55°	5596	2083	592
60°	5330	1287	170
65°	5002	468	100
70°	4527	165	41
75°	3933	55	27
80°	3013	41	0
85°	1379	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6019 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.7	5.7
10°-20°	251.6	15.4
20°-30°	340.4	20.8
30°-40°	349.7	21.4
40°-50°	289.7	17.7
50°-60°	186.0	11.4
60°-70°	89.9	5.5
70°-80°	30.4	1.9
80°-90°	3.9	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°	685.8	41.9
0°-40°	1035.5	63.3
0°-60°	1511.3	92.4
0°-90°	1635.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1635.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	997	1005	994	988	993	95
15°	949	937	891	860	853	267
25°	859	817	732	666	644	395
35°	739	668	545	450	416	462
45°	602	503	353	244	206	464
55°	454	333	169	74	48	406
65°	299	165	28	8	6	296
75°	144	31	2	1	1	153
85°	17	0	0	0	0	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1009	1009	1009	1009	1009
2.5°	1003	1011	1004	1003	1005
5°	997	1005	994	988	993
7.5°	990	994	975	965	967
10°	980	979	951	934	931
12.5°	965	960	923	899	894
15°	949	937	891	860	853
17.5°	930	911	856	816	806
20°	908	882	817	768	753
22.5°	884	851	776	718	698
25°	859	817	732	666	644
27.5°	831	782	688	613	586
30°	801	745	641	559	532
32.5°	770	708	594	505	472
35°	739	668	545	450	416
37.5°	706	628	497	398	361
40°	672	587	448	344	308
42.5°	637	545	399	293	256
45°	602	503	353	244	206
47.5°	566	460	305	196	163
50°	529	418	259	153	121
52.5°	492	375	212	111	82
55°	454	333	169	74	48
57.5°	416	290	129	41	18
60°	377	249	91	14	12
62.5°	339	205	57	11	9
65°	299	165	28	8	6
67.5°	260	127	12	5	3
70°	219	92	8	3	2
72.5°	181	59	5	2	1
75°	144	31	2	1	1
77.5°	108	13	1	1	1
80°	74	6	1	1	0
82.5°	44	2	1	1	0
85°	17	0	0	0	0
87.5°	1	0	0	0	0
90°	0	0	0	0	0

(END OF REPORT)