

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: P1056470

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056470
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-S850D835-X4F0-XX-UDD-FLL-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

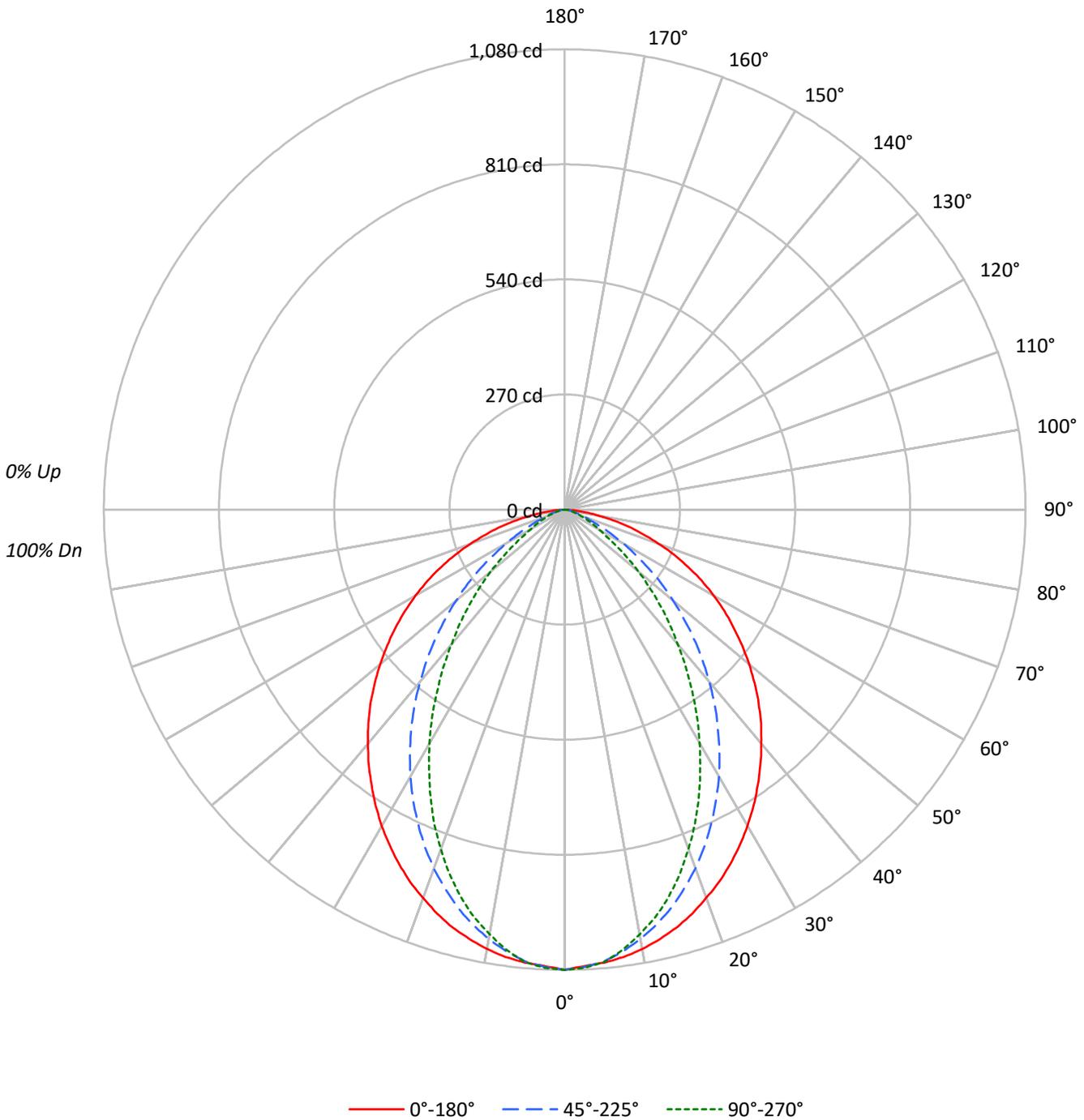
Lumens per Lamp: N/A
Luminaire Lumens: 1952.0 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	7635	7635	7635
5°	7572	7551	7565
10°	7516	7343	7265
15°	7428	7077	6887
20°	7297	6741	6380
25°	7161	6342	5803
30°	6996	5902	5167
35°	6809	5402	4496
40°	6617	4854	3802
45°	6428	4279	3149
50°	6203	3640	2475
55°	5965	2958	1799
60°	5698	2206	1287
65°	5353	1455	1004
70°	4837	1013	703
75°	4206	656	546
80°	3298	489	448
85°	1703	406	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	5.2
10°-20°	273.5	14.0
20°-30°	378.2	19.4
30°-40°	400.7	20.5
40°-50°	349.7	17.9
50°-60°	248.7	12.7
60°-70°	138.3	7.1
70°-80°	53.2	2.7
80°-90°	9.2	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°	752.2	38.5
0°-40°	1152.9	59.1
0°-60°	1751.3	89.7
0°-90°	1952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1067	1075	1064	1061	1066	101
15°	1015	1006	967	946	941	286
25°	918	887	813	763	744	423
35°	789	735	626	550	521	494
45°	643	566	428	342	315	496
55°	484	388	240	166	146	433
65°	320	210	87	64	60	316
75°	154	60	24	20	20	163
85°	21	6	5	4	4	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1080	1080	1080	1080	1080
2.5°	1072	1083	1074	1075	1076
5°	1067	1075	1064	1061	1066
7.5°	1059	1065	1046	1039	1042
10°	1047	1049	1023	1013	1012
12.5°	1032	1029	997	981	980
15°	1015	1006	967	946	941
17.5°	994	980	932	905	897
20°	970	951	896	861	848
22.5°	946	920	856	812	798
25°	918	887	813	763	744
27.5°	888	851	769	711	688
30°	857	814	723	658	633
32.5°	824	775	675	604	578
35°	789	735	626	550	521
37.5°	754	694	578	497	467
40°	717	652	526	443	412
42.5°	681	609	477	392	364
45°	643	566	428	342	315
47.5°	604	521	379	295	268
50°	564	477	331	249	225
52.5°	524	433	286	205	184
55°	484	388	240	166	146
57.5°	444	344	197	130	112
60°	403	299	156	96	91
62.5°	362	255	121	79	75
65°	320	210	87	64	60
67.5°	278	169	63	49	46
70°	234	129	49	37	34
72.5°	192	93	35	27	26
75°	154	60	24	20	20
77.5°	116	36	17	15	15
80°	81	21	12	11	11
82.5°	49	11	8	7	7
85°	21	6	5	4	4
87.5°	4	2	2	2	2
90°	0	0	0	0	0

(END OF REPORT)