

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1056552

Luminaire Tested: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056552
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-H375D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

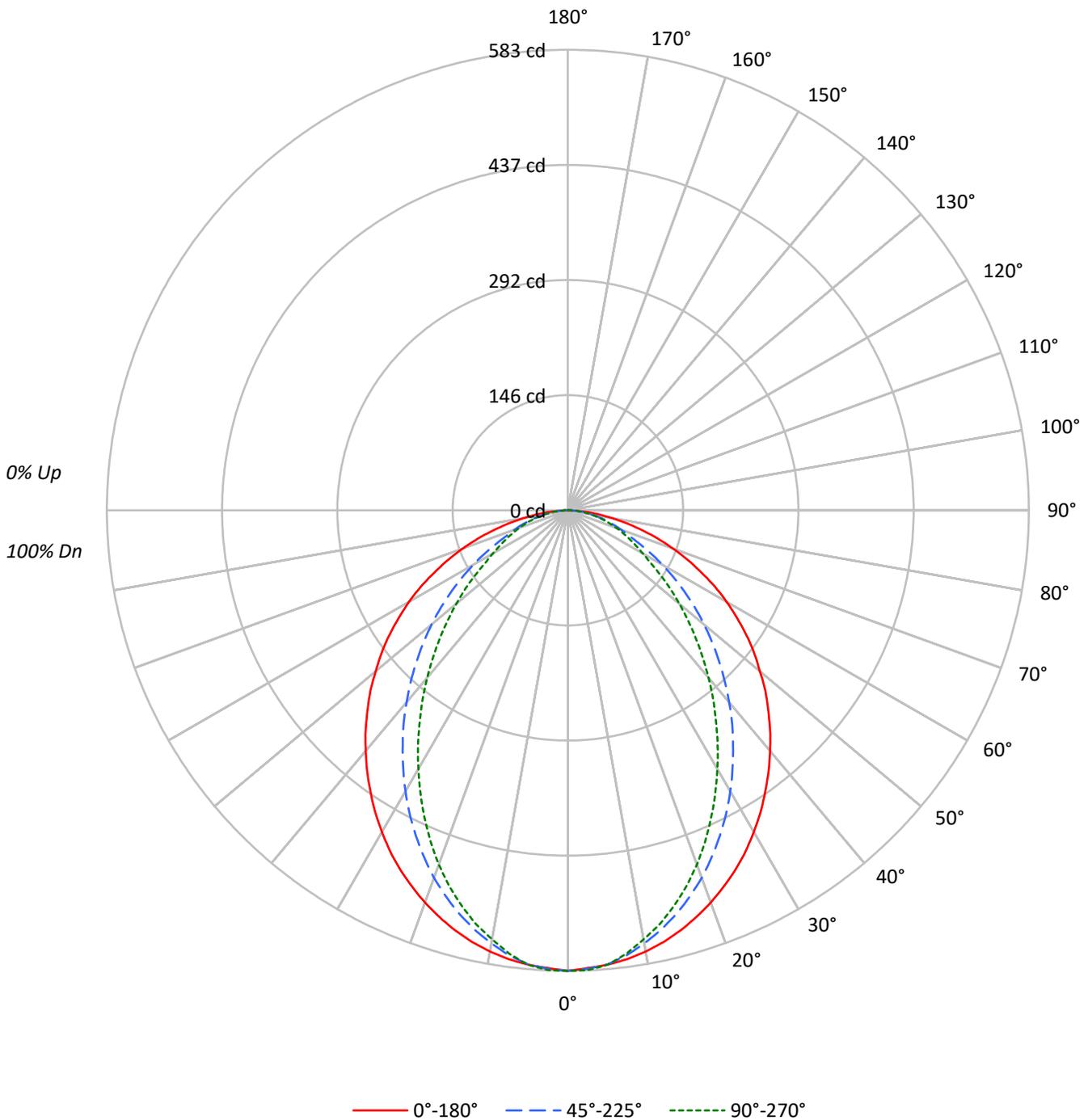
Lumens per Lamp: N/A
Luminaire Lumens: 1235.9 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

TEST NUMBER: P1056552

CATALOG NUMBER: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1056552

CATALOG NUMBER: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

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	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	31	42	35	30	41	35	30	40	34	30	28																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4122	4122	4122
5°	4098	4095	4098
10°	4071	3995	3958
15°	4030	3874	3794
20°	3975	3724	3590
25°	3915	3546	3346
30°	3838	3353	3087
35°	3755	3144	2818
40°	3670	2929	2553
45°	3581	2704	2287
50°	3486	2473	2025
55°	3398	2221	1760
60°	3279	1953	1547
65°	3116	1656	1439
70°	2925	1480	1346
75°	2644	1363	1270
80°	2296	1238	1185
85°	1793	1095	1095

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3581 cd/sqm



TEST NUMBER: P1056552

CATALOG NUMBER: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	4.4
10°-20°	149.8	12.1
20°-30°	211.6	17.1
30°-40°	233.0	18.8
40°-50°	217.3	17.6
50°-60°	173.5	14.0
60°-70°	116.7	9.4
70°-80°	62.2	5.0
80°-90°	17.3	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°	416.0	33.7
0°-40°	648.9	52.5
0°-60°	1039.7	84.1
0°-90°	1235.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	578	582	577	575	578	55
15°	551	548	529	520	518	155
25°	502	487	455	435	429	231
35°	435	409	364	336	326	272
45°	358	324	270	238	229	277
55°	276	234	180	152	143	246
65°	186	146	99	88	86	185
75°	97	64	50	47	46	103
85°	22	15	14	14	14	26
90°	0	0	0	0	0	



TEST NUMBER: P1056552

CATALOG NUMBER: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.1	583.1	583.1	583.1	583.1
2.5°	580.1	584.9	580.9	581.8	582.7
5°	577.5	582.3	577.0	575.3	577.5
7.5°	573.1	577.0	568.4	564.4	566.2
10°	567.1	569.7	556.6	551.4	551.4
12.5°	559.7	559.7	544.0	536.7	536.7
15°	550.6	547.5	529.3	520.2	518.4
17.5°	540.1	534.5	512.8	501.1	498.9
20°	528.4	519.3	495.0	479.8	477.2
22.5°	515.4	503.7	475.4	456.8	453.7
25°	501.9	486.7	454.6	434.6	429.0
27.5°	486.7	468.5	433.3	410.7	403.8
30°	470.2	449.4	410.7	385.6	378.2
32.5°	453.3	429.9	387.7	360.8	352.6
35°	435.1	409.4	364.3	335.6	326.5
37.5°	416.8	389.0	341.3	311.3	301.8
40°	397.7	367.3	317.4	286.6	276.6
42.5°	378.6	346.1	293.9	262.7	252.3
45°	358.2	324.3	270.5	237.5	228.8
47.5°	338.7	302.2	247.5	215.4	205.8
50°	317.0	279.2	224.9	192.8	184.1
52.5°	297.0	256.6	202.3	172.4	163.3
55°	275.7	234.0	180.2	151.5	142.8
57.5°	253.6	211.5	158.9	132.0	123.7
60°	231.9	188.9	138.1	113.3	109.4
62.5°	209.7	167.6	118.5	99.4	96.8
65°	186.3	145.5	99.0	87.7	86.0
67.5°	164.1	124.2	83.4	76.9	75.1
70°	141.5	102.9	71.6	66.0	65.1
72.5°	119.4	82.5	60.4	56.4	55.6
75°	96.8	64.3	49.9	46.9	46.5
77.5°	76.0	48.2	39.5	38.2	37.3
80°	56.4	36.0	30.4	29.5	29.1
82.5°	38.6	24.7	21.7	21.7	20.8
85°	22.1	15.2	13.5	13.9	13.5
87.5°	8.2	6.5	6.1	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1056552
 CATALOG NUMBER: S125R3DR-H375D835-X4F0-XX-UDD-FLL-W

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.21	17.75	16.58	18.06	18.38	12.59	14.13	12.96	14.44	14.76
	3H	18.00	19.38	18.37	19.71	20.07	14.07	15.45	14.45	15.78	16.14
	4H	18.65	19.95	19.05	20.30	20.67	14.66	15.96	15.06	16.31	16.68
	6H	19.12	20.33	19.54	20.69	21.08	15.12	16.32	15.53	16.69	17.08
	8H	19.28	20.42	19.70	20.81	21.21	15.28	16.42	15.71	16.81	17.21
	12H	19.37	20.47	19.80	20.85	21.28	15.40	16.49	15.83	16.87	17.30
4H	2H	16.35	17.64	16.74	17.99	18.37	13.27	14.57	13.67	14.92	15.29
	3H	18.31	19.40	18.73	19.79	20.20	14.95	16.03	15.36	16.43	16.83
	4H	19.06	20.03	19.49	20.45	20.89	15.65	16.62	16.08	17.04	17.48
	6H	19.65	20.50	20.11	20.94	21.40	16.23	17.08	16.69	17.52	17.98
	8H	19.86	20.65	20.32	21.10	21.56	16.44	17.23	16.90	17.68	18.15
	12H	20.01	20.72	20.49	21.19	21.66	16.60	17.31	17.08	17.79	18.26
8H	4H	19.12	19.92	19.59	20.36	20.83	16.01	16.81	16.48	17.25	17.72
	6H	19.78	20.44	20.28	20.93	21.41	16.71	17.37	17.21	17.86	18.34
	8H	20.04	20.62	20.55	21.13	21.62	17.00	17.59	17.51	18.10	18.58
	12H	20.24	20.76	20.75	21.26	21.82	17.24	17.76	17.75	18.25	18.82
12H	4H	19.12	19.83	19.60	20.30	20.77	16.06	16.77	16.54	17.25	17.72
	6H	19.78	20.37	20.29	20.88	21.36	16.79	17.38	17.30	17.88	18.37
	8H	20.07	20.59	20.58	21.08	21.65	17.13	17.65	17.64	18.14	18.71