

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



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056436

Luminaire Tested: S125R3DR-S375D950-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056436
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-S375D950-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

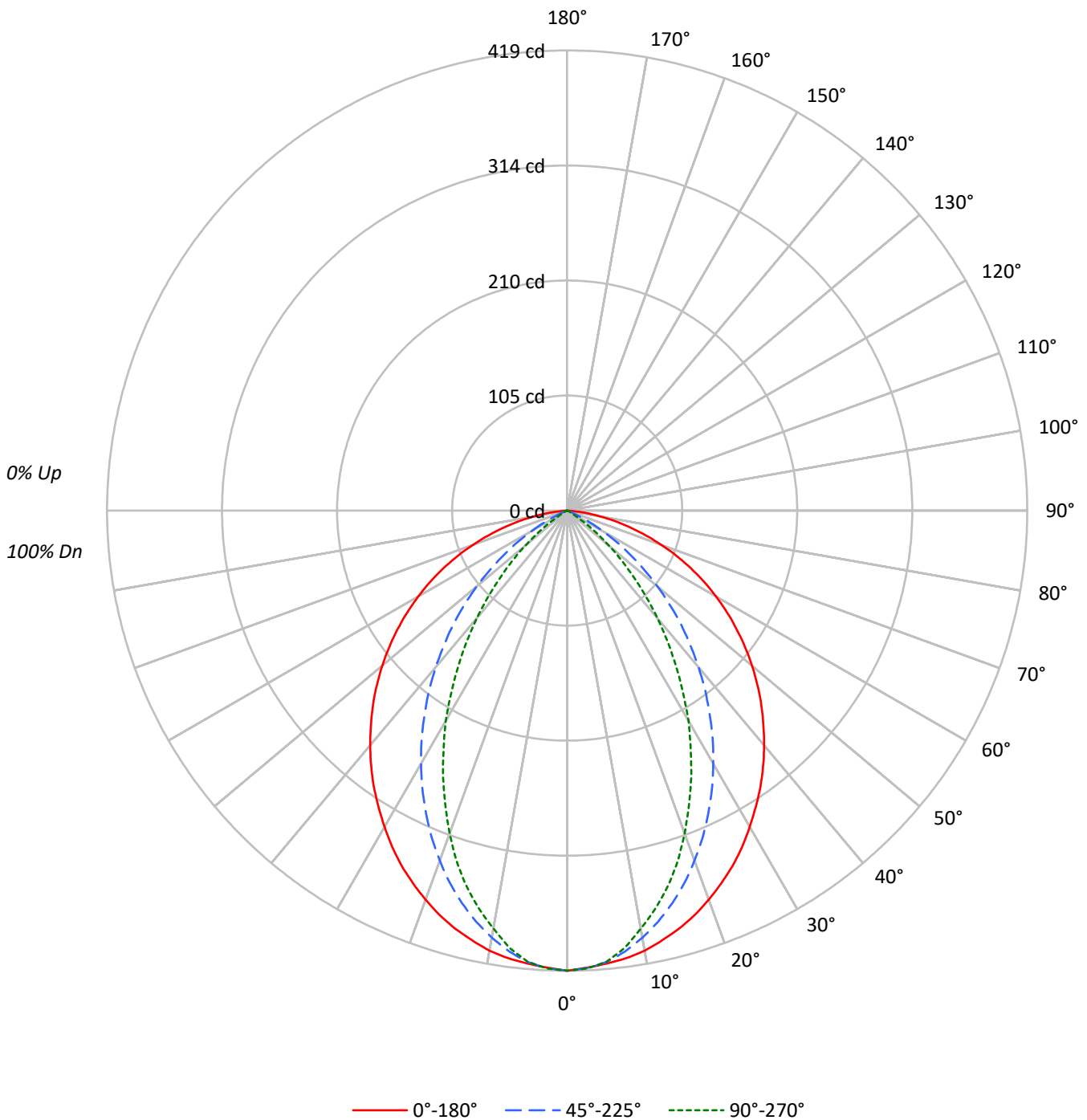
Lumens per Lamp: N/A
Luminaire Lumens: 679.1 lumens
Efficiency: N/A
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (A_{in}): 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: P1056436

CATALOG NUMBER: S125R3DR-S375D950-X4F0-XX-UDD-F-B

Luminous Intensity Polar Plot





TEST NUMBER: P1056436

CATALOG NUMBER: S125R3DR-S375D950-X4F0-XX-UDD-F-B

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	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°	2962	2962	2962
5°	2938	2929	2926
10°	2921	2835	2775
15°	2884	2708	2592
20°	2836	2552	2352
25°	2782	2371	2086
30°	2715	2173	1803
35°	2649	1953	1490
40°	2575	1716	1180
45°	2499	1466	855
50°	2416	1182	552
55°	2323	865	245
60°	2213	534	71
65°	2078	194	42
70°	1879	68	17
75°	1633	22	11
80°	1250	16	0
85°	576	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2499 cd/sqm



TEST NUMBER: P1056436

CATALOG NUMBER: S125R3DR-S375D950-X4F0-XX-UDD-F-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.9	5.7
10°-20°	104.5	15.4
20°-30°	141.4	20.8
30°-40°	145.2	21.4
40°-50°	120.3	17.7
50°-60°	77.2	11.4
60°-70°	37.3	5.5
70°-80°	12.6	1.9
80°-90°	1.6	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°	284.8	41.9
0°-40°	430.0	63.3
0°-60°	627.5	92.4
0°-90°	679.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	679.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	414	417	413	410	412	39
15°	394	389	370	357	354	111
25°	357	339	304	276	267	164
35°	307	277	226	187	173	192
45°	250	209	147	101	86	193
55°	188	138	70	31	20	168
65°	124	68	12	3	2	123
75°	60	13	1	0	0	63
85°	7	0	0	0	0	11
90°	0	0	0	0	0	



TEST NUMBER: P1056436

CATALOG NUMBER: S125R3DR-S375D950-X4F0-XX-UDD-F-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.0	419.0	419.0	419.0	419.0
2.5°	416.5	419.8	416.9	416.5	417.3
5°	414.0	417.3	412.7	410.3	412.3
7.5°	411.1	412.7	404.9	400.7	401.5
10°	406.9	406.5	394.9	387.8	386.6
12.5°	400.7	398.6	383.3	373.3	371.2
15°	394.1	389.1	370.0	357.1	354.2
17.5°	386.2	378.3	355.4	338.8	334.7
20°	377.0	366.2	339.2	318.9	312.7
22.5°	367.1	353.4	322.2	298.1	289.8
25°	356.7	339.2	304.0	276.5	267.4
27.5°	345.1	324.7	285.7	254.5	243.3
30°	332.6	309.4	266.2	232.1	220.9
32.5°	319.7	294.0	246.7	209.7	196.0
35°	306.9	277.4	226.3	186.9	172.7
37.5°	293.2	260.8	206.4	165.3	149.9
40°	279.0	243.7	186.0	142.8	127.9
42.5°	264.5	226.3	165.7	121.7	106.3
45°	250.0	208.9	146.6	101.3	85.5
47.5°	235.0	191.0	126.6	81.4	67.7
50°	219.7	173.6	107.5	63.5	50.2
52.5°	204.3	155.7	88.0	46.1	34.0
55°	188.5	138.3	70.2	30.7	19.9
57.5°	172.7	120.4	53.6	17.0	7.5
60°	156.5	103.4	37.8	5.8	5.0
62.5°	140.8	85.1	23.7	4.6	3.7
65°	124.2	68.5	11.6	3.3	2.5
67.5°	108.0	52.7	5.0	2.1	1.2
70°	90.9	38.2	3.3	1.2	0.8
72.5°	75.2	24.5	2.1	0.8	0.4
75°	59.8	12.9	0.8	0.4	0.4
77.5°	44.8	5.4	0.4	0.4	0.4
80°	30.7	2.5	0.4	0.4	0.0
82.5°	18.3	0.8	0.4	0.4	0.0
85°	7.1	0.0	0.0	0.0	0.0
87.5°	0.4	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1056436
 CATALOG NUMBER: S125R3DR-S375D950-X4F0-XX-UDD-F-B

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	14.84	16.22	15.20	16.54	16.85	0.00	1.08	0.06	1.40	1.71
	3H	16.39	17.62	16.77	17.95	18.31	0.00	0.85	0.00	1.18	1.54
	4H	16.91	18.06	17.32	18.41	18.79	0.00	0.70	0.00	1.05	1.43
	6H	17.25	18.30	17.67	18.67	19.07	0.00	0.53	0.00	0.90	1.30
	8H	17.33	18.33	17.76	18.72	19.12	0.00	0.44	0.00	0.83	1.23
	12H	17.35	18.30	17.78	18.69	19.12	0.00	0.35	0.00	0.74	1.17
4H	2H	14.64	15.79	15.04	16.14	16.52	0.56	1.71	0.96	2.06	2.44
	3H	16.26	17.19	16.67	17.59	18.00	0.51	1.44	0.92	1.84	2.25
	4H	16.78	17.61	17.21	18.03	18.47	0.43	1.26	0.86	1.68	2.12
	6H	17.15	17.87	17.62	18.32	18.78	0.36	1.08	0.83	1.53	1.99
	8H	17.25	17.92	17.72	18.37	18.84	0.31	0.98	0.78	1.43	1.90
	12H	17.29	17.88	17.77	18.36	18.84	0.27	0.86	0.76	1.35	1.82
8H	4H	16.65	17.32	17.12	17.77	18.24	1.45	2.13	1.92	2.57	3.04
	6H	17.01	17.56	17.51	18.05	18.53	1.37	1.92	1.87	2.41	2.90
	8H	17.10	17.59	17.62	18.11	18.60	1.32	1.81	1.84	2.32	2.82
	12H	17.15	17.58	17.66	18.08	18.65	1.28	1.71	1.79	2.21	2.78
12H	4H	16.61	17.20	17.10	17.69	18.16	1.53	2.13	2.02	2.61	3.08
	6H	16.95	17.44	17.47	17.95	18.45	1.43	1.93	1.95	2.44	2.93
	8H	17.06	17.50	17.57	17.99	18.56	1.40	1.84	1.91	2.33	2.90