

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: P1056573

Luminaire Tested: S125R3DR-H375D950-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056573
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-H375D950-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

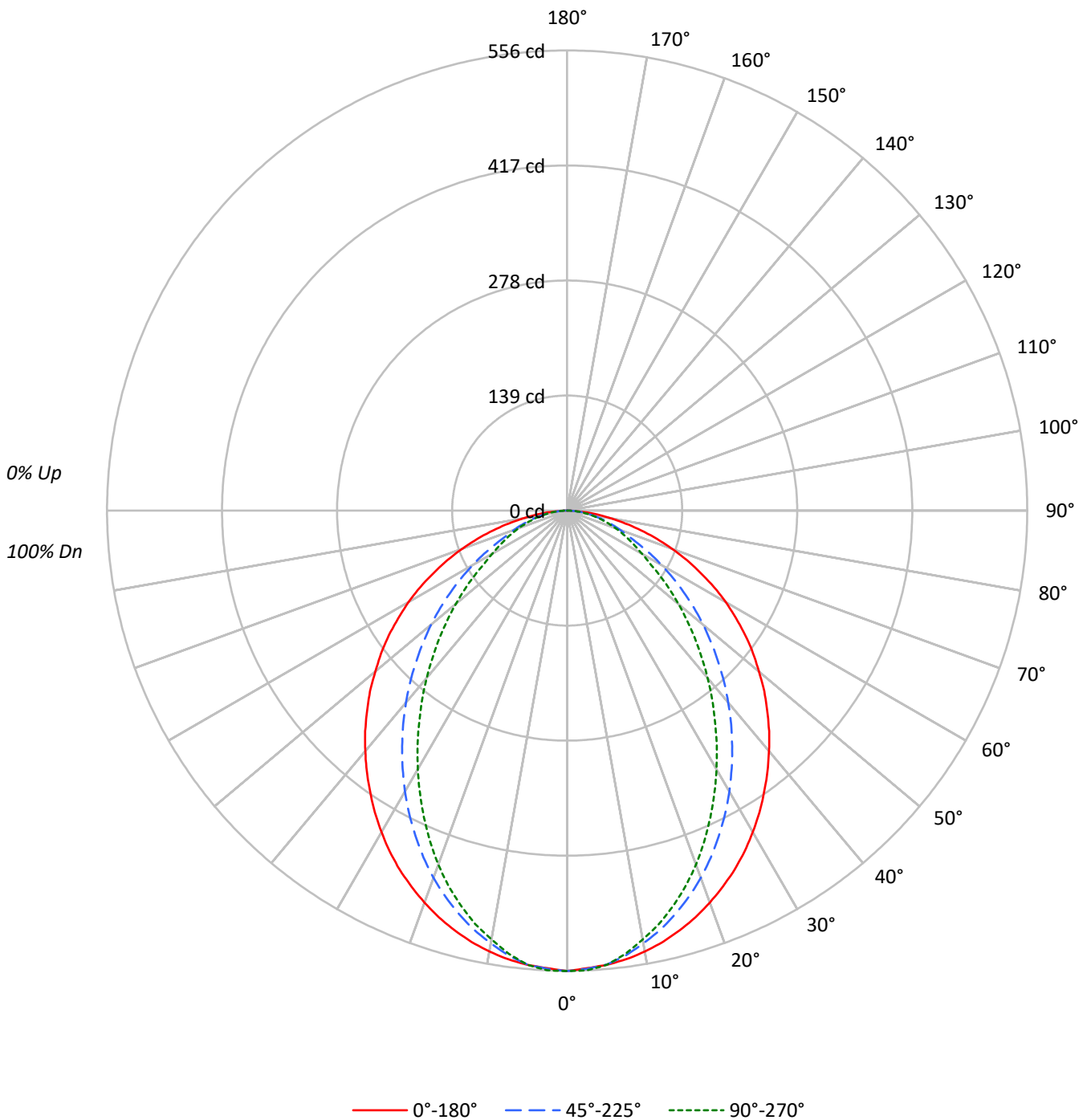
Lumens per Lamp: N/A
Luminaire Lumens: 1179.1 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: P1056573

CATALOG NUMBER: S125R3DR-H375D950-X4F0-XX-UDD-F-W

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	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°	3933	3933	3933
5°	3909	3907	3909
10°	3884	3812	3777
15°	3844	3695	3620
20°	3792	3552	3424
25°	3735	3383	3192
30°	3662	3199	2945
35°	3581	2999	2688
40°	3501	2794	2435
45°	3416	2580	2182
50°	3326	2360	1931
55°	3241	2119	1680
60°	3127	1862	1476
65°	2972	1579	1372
70°	2790	1412	1284
75°	2524	1300	1210
80°	2190	1181	1132
85°	1711	1038	1038

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3416 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	4.4
10°-20°	142.9	12.1
20°-30°	201.9	17.1
30°-40°	222.2	18.8
40°-50°	207.3	17.6
50°-60°	165.5	14.0
60°-70°	111.4	9.4
70°-80°	59.3	5.0
80°-90°	16.5	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°	396.8	33.7
0°-40°	619.1	52.5
0°-60°	991.9	84.1
0°-90°	1179.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1179.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	551	556	550	549	551	52
15°	525	522	505	496	495	148
25°	479	464	434	415	409	220
35°	415	391	348	320	312	260
45°	342	309	258	227	218	264
55°	263	223	172	145	136	235
65°	178	139	94	84	82	176
75°	92	61	48	45	44	98
85°	21	14	13	13	13	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	556.3	556.3	556.3	556.3	556.3
2.5°	553.4	558.0	554.2	555.1	555.9
5°	550.9	555.5	550.5	548.8	550.9
7.5°	546.8	550.5	542.2	538.5	540.1
10°	541.0	543.5	531.0	526.1	526.1
12.5°	533.9	533.9	519.0	512.0	512.0
15°	525.2	522.3	504.9	496.2	494.6
17.5°	515.3	509.9	489.2	478.0	475.9
20°	504.1	495.4	472.2	457.7	455.2
22.5°	491.7	480.5	453.6	435.8	432.9
25°	478.8	464.3	433.7	414.6	409.2
27.5°	464.3	446.9	413.4	391.9	385.2
30°	448.6	428.7	391.9	367.8	360.8
32.5°	432.4	410.1	369.9	344.2	336.3
35°	415.0	390.6	347.5	320.2	311.5
37.5°	397.7	371.1	325.6	297.0	287.9
40°	379.4	350.4	302.8	273.4	263.9
42.5°	361.2	330.1	280.4	250.6	240.7
45°	341.7	309.4	258.1	226.6	218.3
47.5°	323.1	288.3	236.1	205.5	196.3
50°	302.4	266.3	214.6	183.9	175.6
52.5°	283.3	244.8	193.0	164.4	155.7
55°	263.0	223.3	171.9	144.6	136.3
57.5°	241.9	201.7	151.6	125.9	118.1
60°	221.2	180.2	131.7	108.1	104.4
62.5°	200.1	159.9	113.1	94.9	92.4
65°	177.7	138.8	94.4	83.7	82.0
67.5°	156.6	118.5	79.5	73.3	71.7
70°	135.0	98.2	68.3	63.0	62.1
72.5°	113.9	78.7	57.6	53.8	53.0
75°	92.4	61.3	47.6	44.7	44.3
77.5°	72.5	46.0	37.7	36.5	35.6
80°	53.8	34.4	29.0	28.2	27.8
82.5°	36.9	23.6	20.7	20.7	19.9
85°	21.1	14.5	12.8	13.3	12.8
87.5°	7.9	6.2	5.8	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0



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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	16.05	17.58	16.41	17.90	18.21	12.43	13.97	12.79	14.28	14.60
	3H	17.83	19.21	18.21	19.54	19.90	13.90	15.29	14.28	15.62	15.98
	4H	18.48	19.78	18.88	20.13	20.51	14.49	15.79	14.89	16.14	16.52
	6H	18.96	20.16	19.37	20.53	20.92	14.96	16.16	15.37	16.52	16.92
	8H	19.11	20.26	19.54	20.65	21.05	15.12	16.26	15.54	16.65	17.05
	12H	19.21	20.31	19.64	20.69	21.12	15.23	16.33	15.66	16.71	17.14
4H	2H	16.18	17.48	16.58	17.83	18.20	13.10	14.40	13.50	14.75	15.13
	3H	18.15	19.23	18.56	19.63	20.03	14.78	15.86	15.19	16.26	16.66
	4H	18.90	19.87	19.33	20.28	20.72	15.48	16.46	15.92	16.87	17.31
	6H	19.49	20.34	19.95	20.78	21.24	16.07	16.92	16.53	17.36	17.82
	8H	19.70	20.49	20.16	20.93	21.40	16.28	17.07	16.74	17.52	17.98
	12H	19.84	20.55	20.33	21.03	21.50	16.44	17.15	16.92	17.63	18.10
8H	4H	18.96	19.75	19.42	20.20	20.66	15.85	16.64	16.31	17.08	17.55
	6H	19.62	20.27	20.11	20.77	21.24	16.55	17.21	17.05	17.70	18.18
	8H	19.87	20.46	20.39	20.97	21.46	16.84	17.42	17.35	17.93	18.42
	12H	20.08	20.60	20.59	21.09	21.66	17.08	17.60	17.59	18.09	18.65
12H	4H	18.95	19.66	19.43	20.14	20.61	15.90	16.61	16.38	17.08	17.55
	6H	19.61	20.20	20.13	20.71	21.20	16.62	17.21	17.14	17.72	18.21
	8H	19.91	20.43	20.42	20.92	21.48	16.97	17.49	17.48	17.98	18.54