

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: P1056435

Luminaire Tested: S125R3DR-S375D940-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056435
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-S375D940-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

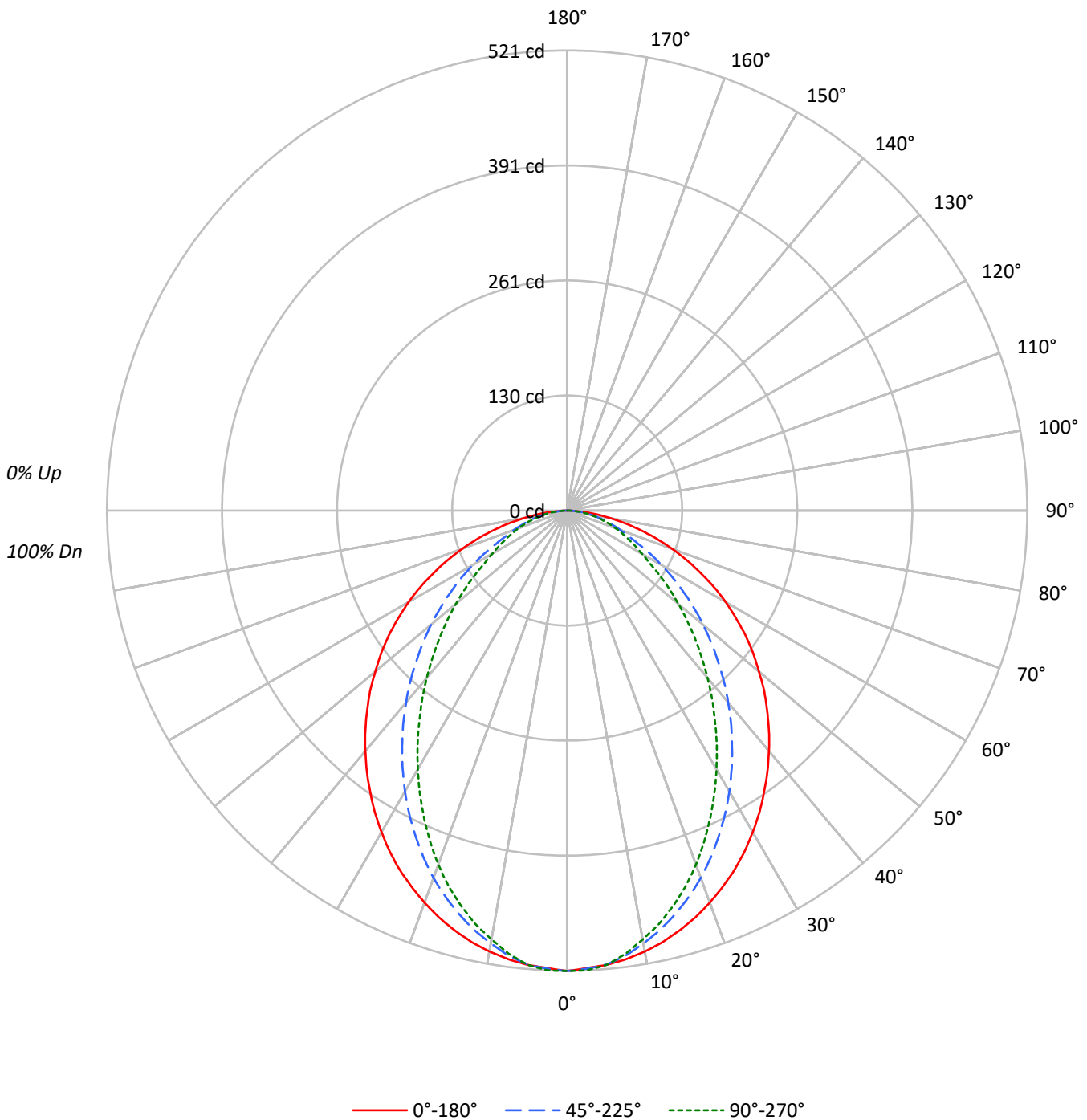
Lumens per Lamp: N/A
Luminaire Lumens: 1104.8 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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: P1056435

CATALOG NUMBER: S125R3DR-S375D940-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	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°	3685	3685	3685
5°	3663	3660	3663
10°	3639	3572	3538
15°	3602	3462	3391
20°	3553	3329	3209
25°	3500	3170	2991
30°	3431	2997	2760
35°	3356	2810	2519
40°	3281	2618	2281
45°	3201	2417	2044
50°	3116	2211	1810
55°	3038	1986	1574
60°	2931	1745	1383
65°	2785	1480	1285
70°	2615	1323	1203
75°	2365	1218	1134
80°	2056	1107	1058
85°	1606	973	973

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3201 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	4.4
10°-20°	133.9	12.1
20°-30°	189.2	17.1
30°-40°	208.2	18.8
40°-50°	194.2	17.6
50°-60°	155.1	14.0
60°-70°	104.3	9.4
70°-80°	55.6	5.0
80°-90°	15.4	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°	371.8	33.7
0°-40°	580.1	52.5
0°-60°	929.4	84.1
0°-90°	1104.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1104.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	516	520	516	514	516	49
15°	492	489	473	465	463	139
25°	449	435	406	388	384	207
35°	389	366	326	300	292	243
45°	320	290	242	212	204	247
55°	246	209	161	136	128	220
65°	166	130	88	78	77	165
75°	87	57	45	42	42	92
85°	20	14	12	12	12	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.3	521.3	521.3	521.3	521.3
2.5°	518.5	522.8	519.3	520.1	520.9
5°	516.2	520.5	515.8	514.3	516.2
7.5°	512.3	515.8	508.1	504.6	506.1
10°	506.9	509.2	497.6	492.9	492.9
12.5°	500.3	500.3	486.3	479.7	479.7
15°	492.1	489.4	473.1	465.0	463.4
17.5°	482.8	477.8	458.4	447.9	446.0
20°	472.3	464.2	442.5	428.9	426.5
22.5°	460.7	450.2	425.0	408.3	405.6
25°	448.7	435.1	406.4	388.5	383.5
27.5°	435.1	418.8	387.3	367.2	361.0
30°	420.3	401.7	367.2	344.7	338.1
32.5°	405.2	384.2	346.6	322.5	315.2
35°	388.9	366.0	325.6	300.0	291.9
37.5°	372.6	347.8	305.1	278.3	269.7
40°	355.5	328.4	283.7	256.2	247.2
42.5°	338.4	309.3	262.8	234.8	225.5
45°	320.2	289.9	241.8	212.3	204.5
47.5°	302.7	270.1	221.2	192.5	184.0
50°	283.3	249.6	201.0	172.3	164.6
52.5°	265.5	229.4	180.9	154.1	145.9
55°	246.5	209.2	161.1	135.5	127.7
57.5°	226.7	189.0	142.1	118.0	110.6
60°	207.3	168.8	123.4	101.3	97.8
62.5°	187.5	149.8	106.0	88.9	86.6
65°	166.5	130.0	88.5	78.4	76.8
67.5°	146.7	111.0	74.5	68.7	67.1
70°	126.5	92.0	64.0	59.0	58.2
72.5°	106.7	73.7	53.9	50.5	49.7
75°	86.6	57.4	44.6	41.9	41.5
77.5°	67.9	43.1	35.3	34.2	33.4
80°	50.5	32.2	27.2	26.4	26.0
82.5°	34.5	22.1	19.4	19.4	18.6
85°	19.8	13.6	12.0	12.4	12.0
87.5°	7.4	5.8	5.4	5.8	5.8
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	15.82	17.36	16.18	17.67	17.99	12.20	13.74	12.57	14.06	14.37
	3H	17.60	18.99	17.98	19.32	19.68	13.68	15.06	14.06	15.39	15.75
	4H	18.26	19.56	18.66	19.91	20.28	14.27	15.57	14.67	15.92	16.29
	6H	18.73	19.94	19.15	20.30	20.69	14.73	15.93	15.14	16.30	16.69
	8H	18.89	20.03	19.31	20.42	20.82	14.89	16.04	15.32	16.42	16.83
	12H	18.98	20.08	19.41	20.46	20.89	15.01	16.10	15.44	16.48	16.91
4H	2H	15.95	17.25	16.35	17.60	17.98	12.88	14.18	13.28	14.53	14.90
	3H	17.92	19.00	18.33	19.40	19.81	14.56	15.64	14.97	16.04	16.44
	4H	18.67	19.64	19.10	20.06	20.50	15.26	16.23	15.69	16.65	17.09
	6H	19.26	20.11	19.72	20.55	21.01	15.85	16.69	16.30	17.14	17.59
	8H	19.47	20.26	19.93	20.71	21.17	16.05	16.85	16.52	17.29	17.76
	12H	19.62	20.33	20.10	20.80	21.27	16.21	16.92	16.69	17.40	17.87
8H	4H	18.73	19.53	19.20	19.97	20.44	15.62	16.42	16.09	16.86	17.33
	6H	19.39	20.05	19.89	20.54	21.02	16.33	16.98	16.82	17.47	17.95
	8H	19.65	20.23	20.16	20.74	21.23	16.61	17.20	17.12	17.71	18.19
	12H	19.85	20.38	20.36	20.87	21.43	16.85	17.37	17.36	17.86	18.43
12H	4H	18.73	19.43	19.21	19.91	20.38	15.67	16.38	16.15	16.86	17.33
	6H	19.39	19.98	19.90	20.49	20.97	16.40	16.99	16.91	17.50	17.98
	8H	19.68	20.20	20.19	20.69	21.26	16.74	17.26	17.25	17.75	18.32