

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: P1056414

Luminaire Tested: S125R3DR-S375D830-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056414
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-S375D830-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

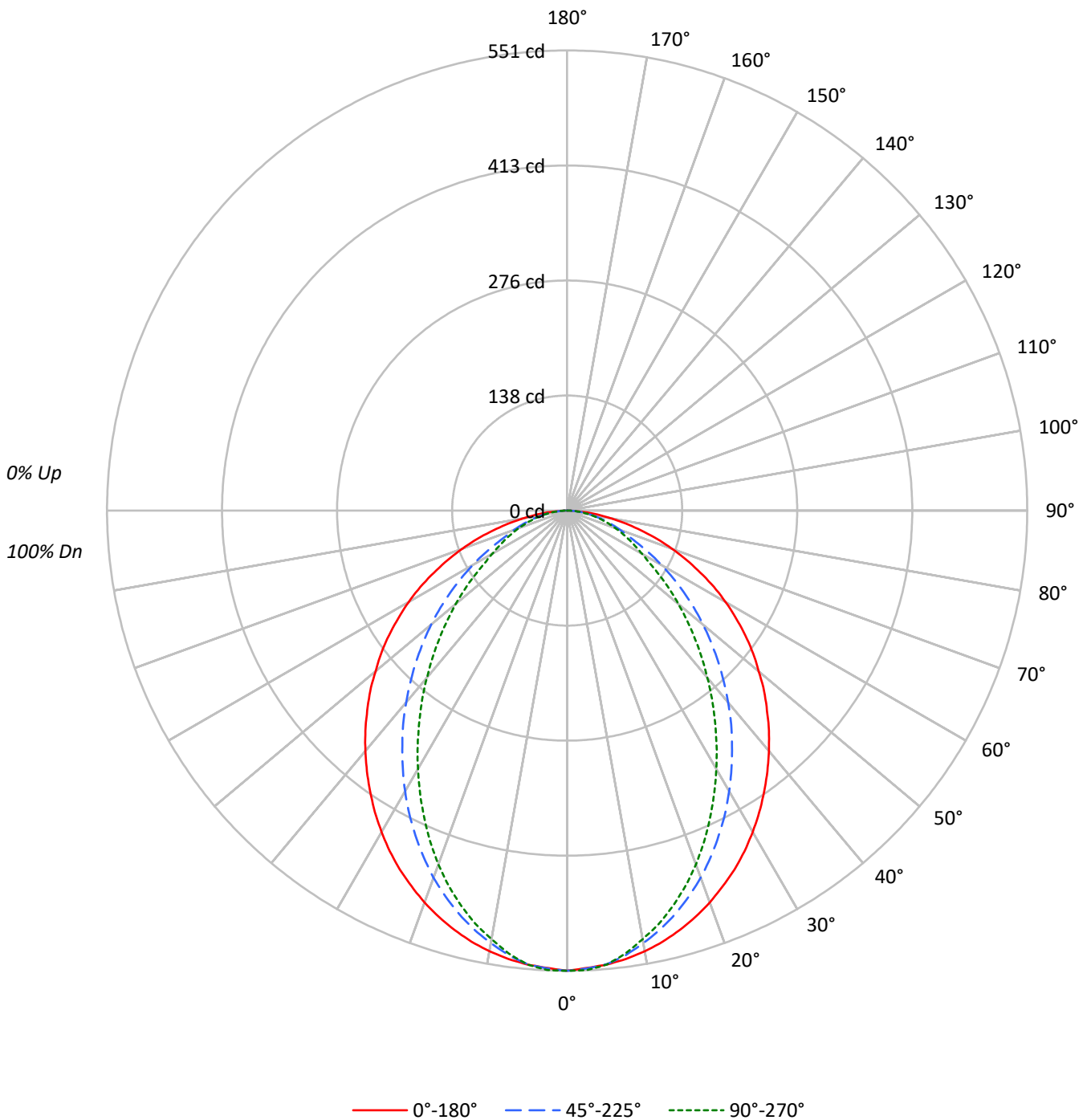
Lumens per Lamp: N/A
Luminaire Lumens: 1167.8 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	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°	3895	3895	3895
5°	3872	3869	3872
10°	3846	3775	3740
15°	3807	3660	3585
20°	3756	3519	3392
25°	3699	3350	3161
30°	3627	3168	2917
35°	3548	2970	2662
40°	3468	2768	2411
45°	3384	2555	2161
50°	3294	2337	1913
55°	3211	2099	1664
60°	3098	1845	1462
65°	2944	1564	1358
70°	2763	1399	1271
75°	2499	1289	1199
80°	2170	1168	1120
85°	1695	1030	1030

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3384 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	4.4
10°-20°	141.5	12.1
20°-30°	199.9	17.1
30°-40°	220.1	18.8
40°-50°	205.3	17.6
50°-60°	163.9	14.0
60°-70°	110.3	9.4
70°-80°	58.7	5.0
80°-90°	16.3	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°	393.0	33.7
0°-40°	613.2	52.5
0°-60°	982.4	84.1
0°-90°	1167.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1167.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	546	550	545	544	546	52
15°	520	517	500	492	490	147
25°	474	460	430	411	405	218
35°	411	387	344	317	308	257
45°	338	306	256	224	216	261
55°	260	221	170	143	135	233
65°	176	137	94	83	81	175
75°	92	61	47	44	44	97
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°	551.0	551.0	551.0	551.0	551.0
2.5°	548.1	552.6	548.9	549.7	550.6
5°	545.6	550.1	545.2	543.6	545.6
7.5°	541.5	545.2	537.0	533.3	535.0
10°	535.8	538.2	525.9	521.0	521.0
12.5°	528.8	528.8	514.0	507.1	507.1
15°	520.2	517.3	500.1	491.5	489.8
17.5°	510.4	505.0	484.5	473.4	471.4
20°	499.3	490.7	467.7	453.3	450.9
22.5°	487.0	475.9	449.2	431.6	428.7
25°	474.2	459.9	429.5	410.7	405.3
27.5°	459.9	442.7	409.4	388.1	381.5
30°	444.3	424.6	388.1	364.3	357.3
32.5°	428.3	406.1	366.4	340.9	333.1
35°	411.1	386.9	344.2	317.1	308.5
37.5°	393.8	367.6	322.5	294.1	285.1
40°	375.8	347.1	299.9	270.8	261.3
42.5°	357.7	327.0	277.7	248.2	238.4
45°	338.5	306.5	255.6	224.4	216.2
47.5°	320.0	285.5	233.8	203.5	194.5
50°	299.5	263.8	212.5	182.2	173.9
52.5°	280.6	242.5	191.2	162.9	154.3
55°	260.5	221.1	170.3	143.2	135.0
57.5°	239.6	199.8	150.2	124.7	116.9
60°	219.1	178.5	130.5	107.1	103.4
62.5°	198.2	158.4	112.0	93.9	91.5
65°	176.0	137.4	93.5	82.9	81.2
67.5°	155.1	117.3	78.8	72.6	71.0
70°	133.7	97.2	67.7	62.4	61.5
72.5°	112.8	77.9	57.0	53.3	52.5
75°	91.5	60.7	47.2	44.3	43.9
77.5°	71.8	45.5	37.3	36.1	35.3
80°	53.3	34.1	28.7	27.9	27.5
82.5°	36.5	23.4	20.5	20.5	19.7
85°	20.9	14.4	12.7	13.1	12.7
87.5°	7.8	6.2	5.7	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	16.01	17.55	16.38	17.87	18.18	12.39	13.93	12.76	14.25	14.56
	3H	17.80	19.18	18.18	19.51	19.87	13.87	15.25	14.25	15.58	15.94
	4H	18.45	19.75	18.85	20.10	20.48	14.46	15.76	14.86	16.11	16.49
	6H	18.93	20.13	19.34	20.49	20.89	14.92	16.12	15.34	16.49	16.88
	8H	19.08	20.23	19.51	20.61	21.02	15.08	16.23	15.51	16.62	17.02
	12H	19.18	20.27	19.61	20.65	21.08	15.20	16.29	15.63	16.68	17.10
4H	2H	16.15	17.45	16.55	17.79	18.17	13.07	14.37	13.47	14.72	15.10
	3H	18.12	19.20	18.53	19.60	20.00	14.75	15.83	15.16	16.23	16.63
	4H	18.86	19.84	19.29	20.25	20.69	15.45	16.42	15.88	16.84	17.28
	6H	19.46	20.30	19.91	20.75	21.21	16.04	16.89	16.49	17.33	17.79
	8H	19.66	20.46	20.13	20.90	21.37	16.25	17.04	16.71	17.48	17.95
	12H	19.81	20.52	20.29	21.00	21.47	16.41	17.12	16.89	17.59	18.06
8H	4H	18.92	19.72	19.39	20.16	20.63	15.82	16.61	16.28	17.05	17.52
	6H	19.58	20.24	20.08	20.73	21.21	16.52	17.17	17.01	17.66	18.14
	8H	19.84	20.43	20.35	20.94	21.42	16.80	17.39	17.31	17.90	18.39
	12H	20.05	20.57	20.56	21.06	21.62	17.04	17.56	17.55	18.06	18.62
12H	4H	18.92	19.63	19.40	20.10	20.58	15.86	16.57	16.34	17.05	17.52
	6H	19.58	20.17	20.09	20.68	21.17	16.59	17.18	17.10	17.69	18.18
	8H	19.87	20.39	20.38	20.89	21.45	16.93	17.45	17.44	17.94	18.51