

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: P1056547

Luminaire Tested: S125R3DRP-H375D830-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056547
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: S125R3DRP-H375D830-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

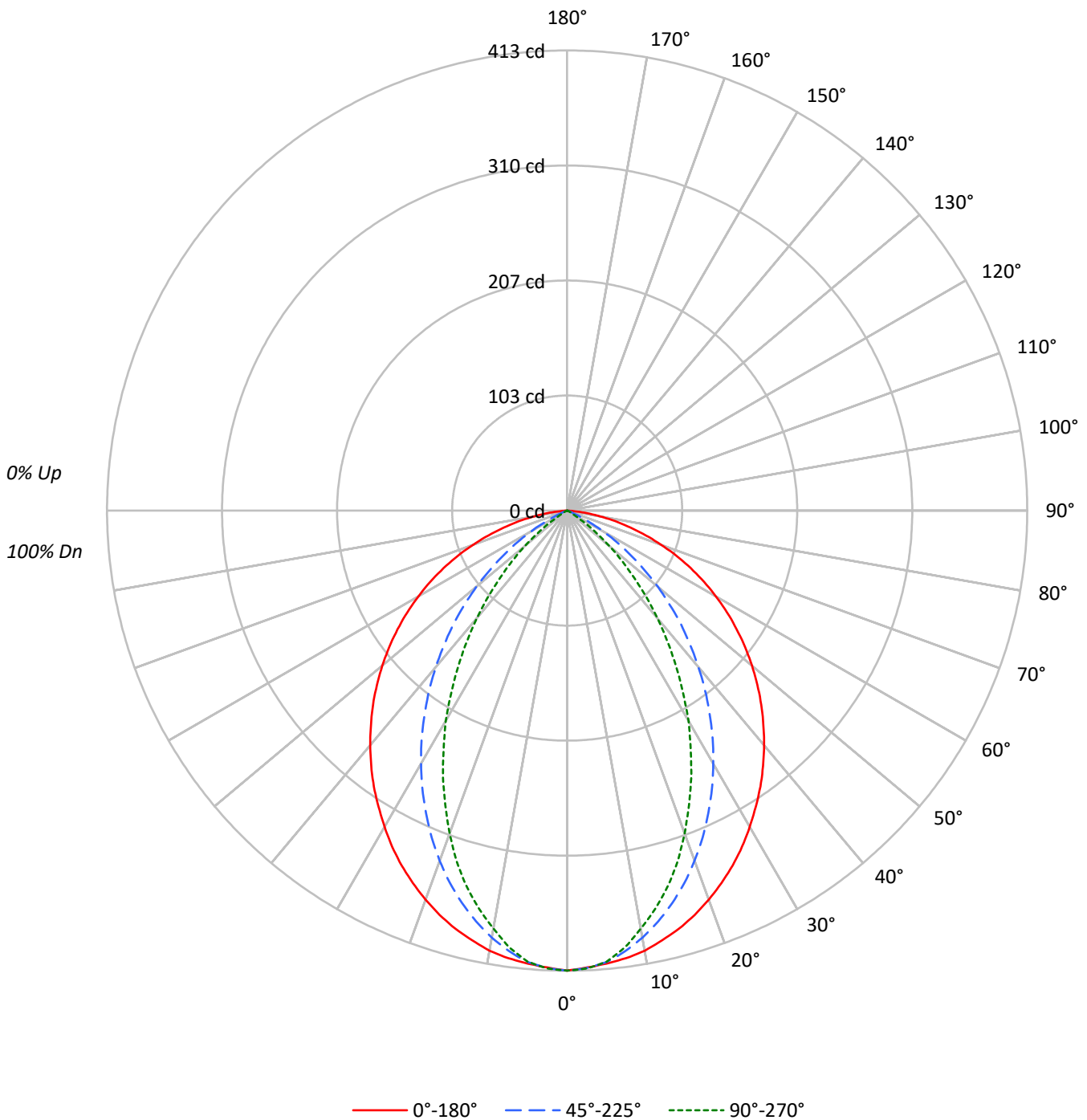
Lumens per Lamp: N/A
Luminaire Lumens: 669.3 lumens
Efficiency: N/A
Efficacy: 57.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.9 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2919	2919	2919
5°	2895	2887	2884
10°	2879	2794	2735
15°	2843	2668	2555
20°	2796	2516	2319
25°	2742	2337	2056
30°	2676	2141	1777
35°	2610	1925	1469
40°	2538	1692	1163
45°	2463	1445	843
50°	2381	1166	544
55°	2290	853	242
60°	2182	526	69
65°	2047	192	42
70°	1852	68	17
75°	1609	22	11
80°	1234	16	0
85°	568	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2463 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	5.7
10°-20°	103.0	15.4
20°-30°	139.3	20.8
30°-40°	143.1	21.4
40°-50°	118.6	17.7
50°-60°	76.1	11.4
60°-70°	36.8	5.5
70°-80°	12.4	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°	280.7	41.9
0°-40°	423.8	63.3
0°-60°	618.5	92.4
0°-90°	669.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	408	411	407	404	406	39
15°	388	384	365	352	349	109
25°	352	334	300	273	264	162
35°	302	273	223	184	170	189
45°	246	206	144	100	84	190
55°	186	136	69	30	20	166
65°	122	68	12	3	2	121
75°	59	13	1	0	0	62
85°	7	0	0	0	0	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.9	412.9	412.9	412.9	412.9
2.5°	410.5	413.7	410.9	410.5	411.3
5°	408.0	411.3	406.8	404.3	406.4
7.5°	405.2	406.8	399.0	394.9	395.7
10°	401.1	400.7	389.2	382.2	381.0
12.5°	394.9	392.9	377.7	367.9	365.9
15°	388.4	383.5	364.6	352.0	349.1
17.5°	380.6	372.8	350.3	333.9	329.9
20°	371.6	361.0	334.4	314.3	308.2
22.5°	361.8	348.3	317.6	293.8	285.7
25°	351.5	334.4	299.6	272.6	263.6
27.5°	340.1	320.0	281.6	250.9	239.8
30°	327.8	304.9	262.3	228.8	217.7
32.5°	315.1	289.7	243.1	206.7	193.2
35°	302.4	273.4	223.0	184.2	170.2
37.5°	288.9	257.0	203.4	162.9	147.7
40°	275.0	240.2	183.3	140.8	126.0
42.5°	260.7	223.0	163.3	119.9	104.8
45°	246.4	205.9	144.5	99.9	84.3
47.5°	231.6	188.3	124.8	80.2	66.7
50°	216.5	171.1	106.0	62.6	49.5
52.5°	201.3	153.5	86.8	45.4	33.6
55°	185.8	136.3	69.2	30.3	19.6
57.5°	170.2	118.7	52.8	16.8	7.4
60°	154.3	101.9	37.2	5.7	4.9
62.5°	138.7	83.9	23.3	4.5	3.7
65°	122.4	67.5	11.5	3.3	2.5
67.5°	106.4	52.0	4.9	2.0	1.2
70°	89.6	37.7	3.3	1.2	0.8
72.5°	74.1	24.1	2.0	0.8	0.4
75°	58.9	12.7	0.8	0.4	0.4
77.5°	44.2	5.3	0.4	0.4	0.4
80°	30.3	2.5	0.4	0.4	0.0
82.5°	18.0	0.8	0.4	0.4	0.0
85°	7.0	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

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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	14.79	16.18	15.16	16.49	16.80	0.00	1.05	0.03	1.36	1.68
	3H	16.34	17.57	16.72	17.90	18.26	0.00	0.81	0.00	1.14	1.50
	4H	16.86	18.01	17.27	18.36	18.74	0.00	0.66	0.00	1.01	1.39
	6H	17.20	18.25	17.62	18.62	19.02	0.00	0.50	0.00	0.87	1.26
	8H	17.28	18.28	17.71	18.67	19.08	0.00	0.40	0.00	0.79	1.20
	12H	17.30	18.25	17.73	18.64	19.07	0.00	0.32	0.00	0.70	1.13
4H	2H	14.59	15.74	15.00	16.09	16.47	0.53	1.68	0.93	2.03	2.41
	3H	16.21	17.14	16.62	17.55	17.95	0.48	1.41	0.89	1.81	2.22
	4H	16.73	17.56	17.16	17.98	18.42	0.40	1.23	0.83	1.65	2.09
	6H	17.11	17.82	17.57	18.27	18.73	0.33	1.05	0.80	1.50	1.96
	8H	17.20	17.88	17.67	18.32	18.79	0.28	0.95	0.75	1.40	1.87
	12H	17.24	17.83	17.73	18.32	18.79	0.24	0.83	0.73	1.32	1.79
8H	4H	16.60	17.27	17.07	17.72	18.19	1.42	2.09	1.89	2.54	3.01
	6H	16.96	17.51	17.46	18.00	18.48	1.33	1.88	1.84	2.38	2.86
	8H	17.05	17.55	17.57	18.06	18.55	1.28	1.77	1.80	2.29	2.78
	12H	17.10	17.53	17.61	18.03	18.60	1.24	1.68	1.75	2.17	2.74
12H	4H	16.56	17.15	17.05	17.64	18.11	1.50	2.09	1.98	2.57	3.05
	6H	16.90	17.39	17.42	17.91	18.40	1.40	1.89	1.92	2.41	2.90
	8H	17.01	17.45	17.53	17.94	18.51	1.36	1.80	1.88	2.29	2.86