

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: P1056413

Luminaire Tested: S125R3DRP-S375D830-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DRP-S375D830-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

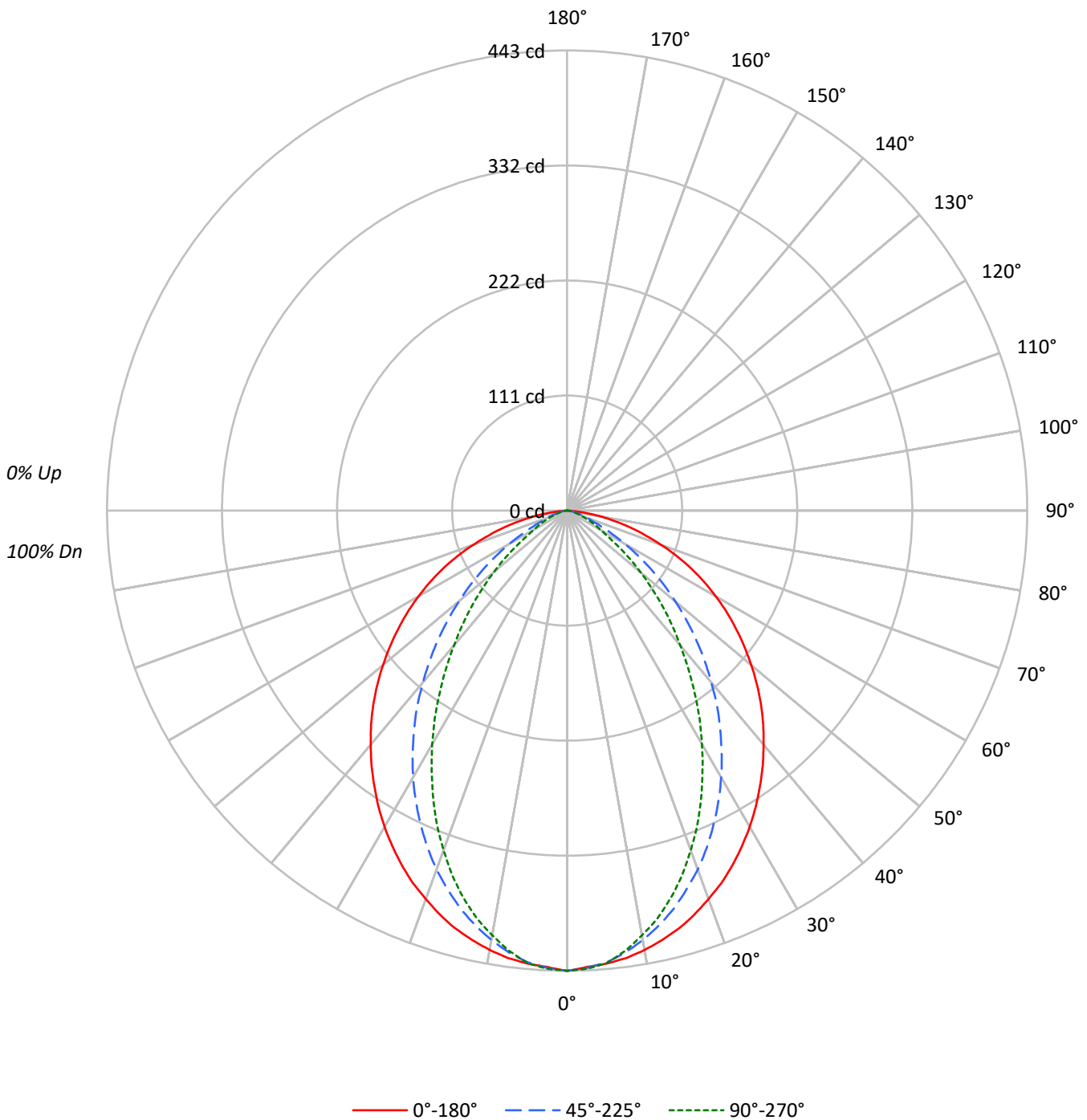
Lumens per Lamp: N/A
Luminaire Lumens: 800.8 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3132	3132	3132
5°	3106	3098	3103
10°	3083	3013	2980
15°	3048	2903	2825
20°	2993	2765	2617
25°	2938	2601	2381
30°	2870	2421	2120
35°	2794	2216	1844
40°	2714	1991	1560
45°	2637	1756	1292
50°	2545	1494	1015
55°	2448	1214	738
60°	2337	905	527
65°	2196	597	411
70°	1984	415	287
75°	1726	268	224
80°	1352	199	183
85°	698	170	130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2637 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.3	5.2
10°-20°	112.2	14.0
20°-30°	155.1	19.4
30°-40°	164.4	20.5
40°-50°	143.5	17.9
50°-60°	102.0	12.7
60°-70°	56.7	7.1
70°-80°	21.8	2.7
80°-90°	3.8	0.5
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°	308.6	38.5
0°-40°	473.0	59.1
0°-60°	718.5	89.7
0°-90°	800.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	438	441	436	435	437	42
15°	416	413	397	388	386	117
25°	377	364	334	313	305	173
35°	324	302	257	226	214	202
45°	264	232	176	140	129	203
55°	199	159	98	68	60	178
65°	131	86	36	26	25	130
75°	63	25	10	8	8	67
85°	9	2	2	2	2	13
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	443.1	443.1	443.1	443.1	443.1
2.5°	439.8	444.3	440.6	441.0	441.4
5°	437.7	441.0	436.5	435.3	437.3
7.5°	434.5	436.9	429.1	426.2	427.5
10°	429.5	430.4	419.7	415.6	415.2
12.5°	423.4	422.1	409.0	402.5	402.0
15°	416.4	412.7	396.7	388.1	386.0
17.5°	407.8	402.0	382.4	371.3	368.0
20°	397.9	390.1	367.6	353.2	347.9
22.5°	388.1	377.4	351.2	333.1	327.4
25°	376.6	363.9	333.5	313.0	305.2
27.5°	364.3	349.1	315.5	291.7	282.3
30°	351.6	333.9	296.6	269.9	259.7
32.5°	338.0	317.9	276.9	247.8	237.1
35°	323.7	301.5	256.8	225.6	213.7
37.5°	309.3	284.7	237.1	203.9	191.6
40°	294.1	267.5	215.8	181.7	169.0
42.5°	279.4	249.8	195.7	160.8	149.3
45°	263.8	232.2	175.6	140.3	129.2
47.5°	247.8	213.7	155.5	121.0	109.9
50°	231.4	195.7	135.8	102.2	92.3
52.5°	215.0	177.6	117.3	84.1	75.5
55°	198.6	159.2	98.5	68.1	59.9
57.5°	182.2	141.1	80.8	53.3	45.9
60°	165.3	122.7	64.0	39.4	37.3
62.5°	148.5	104.6	49.6	32.4	30.8
65°	131.3	86.2	35.7	26.3	24.6
67.5°	114.0	69.3	25.8	20.1	18.9
70°	96.0	52.9	20.1	15.2	13.9
72.5°	78.8	38.2	14.4	11.1	10.7
75°	63.2	24.6	9.8	8.2	8.2
77.5°	47.6	14.8	7.0	6.2	6.2
80°	33.2	8.6	4.9	4.5	4.5
82.5°	20.1	4.5	3.3	2.9	2.9
85°	8.6	2.5	2.1	1.6	1.6
87.5°	1.6	0.8	0.8	0.8	0.8
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	15.13	16.57	15.49	16.89	17.20	7.76	9.21	8.13	9.52	9.83
	3H	16.69	17.97	17.06	18.30	18.66	8.33	9.61	8.70	9.94	10.30
	4H	17.21	18.41	17.61	18.76	19.14	8.45	9.65	8.85	10.00	10.38
	6H	17.55	18.65	17.96	19.02	19.41	8.52	9.62	8.93	9.99	10.39
	8H	17.63	18.68	18.06	19.07	19.47	8.52	9.57	8.95	9.96	10.37
	12H	17.65	18.66	18.08	19.04	19.47	8.51	9.52	8.94	9.90	10.33
4H	2H	15.02	16.23	15.43	16.58	16.96	8.33	9.53	8.73	9.88	10.26
	3H	16.69	17.68	17.10	18.08	18.48	9.00	9.99	9.41	10.39	10.79
	4H	17.24	18.12	17.67	18.54	18.98	9.16	10.04	9.59	10.46	10.90
	6H	17.63	18.40	18.09	18.84	19.30	9.27	10.04	9.73	10.48	10.94
	8H	17.74	18.45	18.20	18.90	19.36	9.28	10.00	9.75	10.44	10.91
	12H	17.78	18.42	18.27	18.90	19.37	9.29	9.92	9.77	10.40	10.87
8H	4H	17.14	17.86	17.61	18.30	18.77	9.43	10.14	9.90	10.59	11.06
	6H	17.53	18.11	18.03	18.61	19.09	9.56	10.15	10.06	10.64	11.12
	8H	17.64	18.16	18.16	18.67	19.16	9.59	10.12	10.11	10.63	11.12
	12H	17.70	18.16	18.21	18.66	19.23	9.61	10.08	10.13	10.57	11.14
12H	4H	17.11	17.74	17.59	18.22	18.69	9.44	10.08	9.93	10.56	11.03
	6H	17.48	18.00	17.99	18.51	19.01	9.58	10.10	10.09	10.61	11.10
	8H	17.61	18.07	18.12	18.56	19.13	9.64	10.10	10.15	10.59	11.16