

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: P1056429

Luminaire Tested: S125R3DR-S375D930-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056429
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-S375D930-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, 90 CRI LEDS
Ballast/Driver: -

Summary

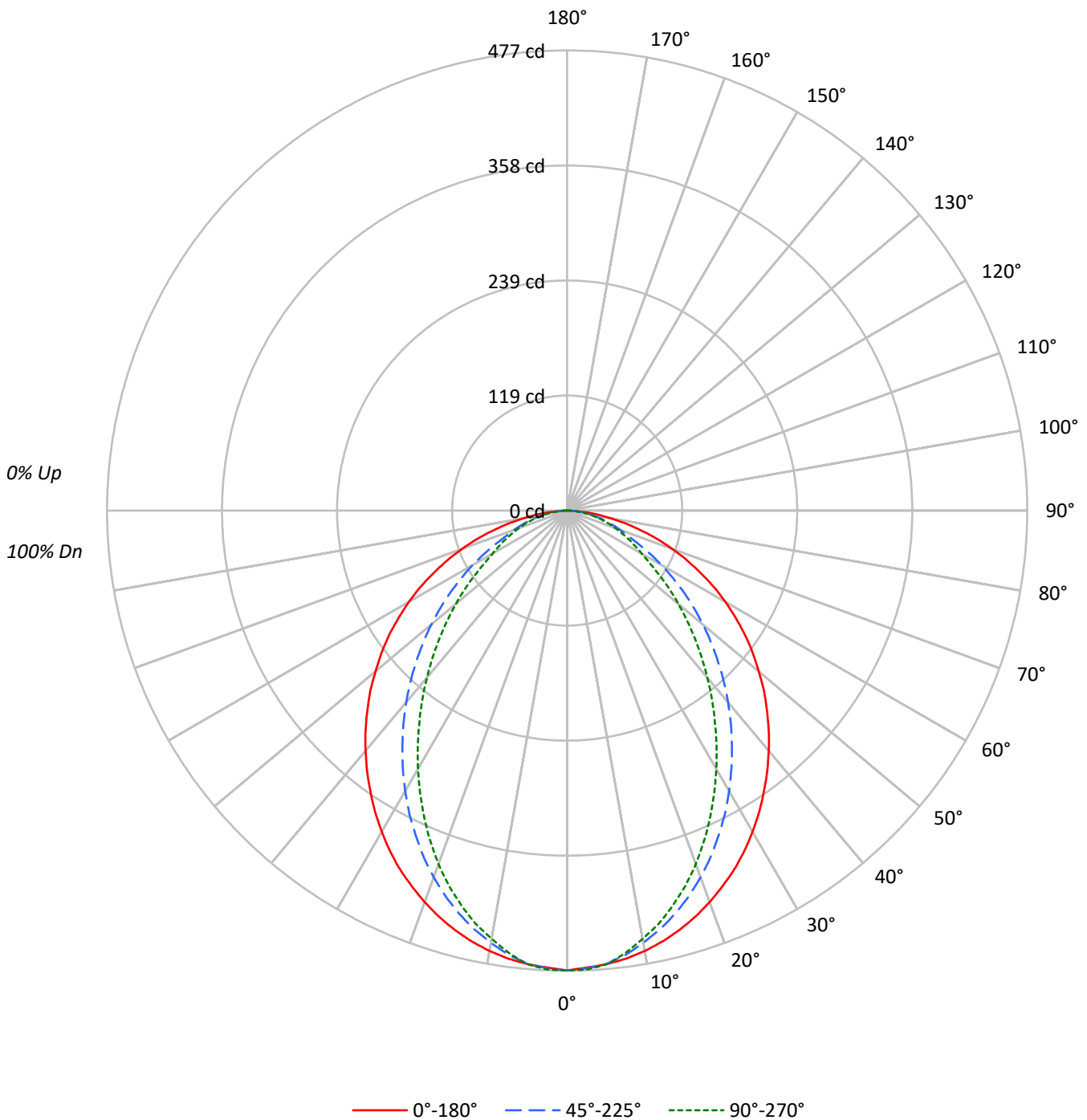
Lumens per Lamp: N/A
Luminaire Lumens: 1010.1 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (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	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°	3369	3369	3369
5°	3349	3347	3349
10°	3327	3265	3235
15°	3293	3166	3101
20°	3249	3043	2934
25°	3200	2898	2735
30°	3137	2740	2523
35°	3069	2569	2303
40°	3000	2394	2086
45°	2927	2210	1870
50°	2850	2021	1655
55°	2777	1815	1440
60°	2679	1595	1264
65°	2546	1353	1176
70°	2391	1211	1100
75°	2161	1114	1038
80°	1877	1010	969
85°	1468	892	892

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2927 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	4.4
10°-20°	122.4	12.1
20°-30°	172.9	17.1
30°-40°	190.4	18.8
40°-50°	177.6	17.6
50°-60°	141.8	14.0
60°-70°	95.4	9.4
70°-80°	50.8	5.0
80°-90°	14.1	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°	340.0	33.7
0°-40°	530.4	52.5
0°-60°	849.7	84.1
0°-90°	1010.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	477	477	477	477	477	
5°	472	476	472	470	472	45
15°	450	448	433	425	424	127
25°	410	398	372	355	351	189
35°	356	335	298	274	267	223
45°	293	265	221	194	187	226
55°	225	191	147	124	117	201
65°	152	119	81	72	70	151
75°	79	52	41	38	38	84
85°	18	12	11	11	11	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	476.6	476.6	476.6	476.6	476.6
2.5°	474.1	478.0	474.8	475.5	476.2
5°	472.0	475.9	471.6	470.2	472.0
7.5°	468.4	471.6	464.5	461.3	462.7
10°	463.5	465.6	454.9	450.7	450.7
12.5°	457.4	457.4	444.6	438.6	438.6
15°	450.0	447.5	432.6	425.1	423.7
17.5°	441.5	436.8	419.1	409.5	407.7
20°	431.9	424.4	404.5	392.1	390.0
22.5°	421.2	411.6	388.6	373.3	370.8
25°	410.2	397.8	371.5	355.2	350.6
27.5°	397.8	382.9	354.2	335.7	330.0
30°	384.3	367.3	335.7	315.1	309.1
32.5°	370.5	351.3	316.9	294.9	288.2
35°	355.6	334.6	297.7	274.3	266.9
37.5°	340.7	318.0	278.9	254.4	246.6
40°	325.1	300.2	259.4	234.2	226.0
42.5°	309.4	282.8	240.2	214.7	206.2
45°	292.8	265.1	221.1	194.1	187.0
47.5°	276.8	247.0	202.3	176.0	168.2
50°	259.1	228.2	183.8	157.6	150.5
52.5°	242.7	209.7	165.4	140.9	133.4
55°	225.3	191.3	147.3	123.8	116.8
57.5°	207.2	172.8	129.9	107.9	101.1
60°	189.5	154.4	112.8	92.6	89.4
62.5°	171.4	137.0	96.9	81.3	79.1
65°	152.2	118.9	80.9	71.7	70.3
67.5°	134.1	101.5	68.1	62.8	61.4
70°	115.7	84.1	58.6	53.9	53.2
72.5°	97.6	67.4	49.3	46.1	45.4
75°	79.1	52.5	40.8	38.3	38.0
77.5°	62.1	39.4	32.3	31.2	30.5
80°	46.1	29.5	24.8	24.1	23.8
82.5°	31.6	20.2	17.7	17.7	17.0
85°	18.1	12.4	11.0	11.4	11.0
87.5°	6.7	5.3	5.0	5.3	5.3
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	15.51	17.05	15.87	17.36	17.68	11.89	13.43	12.26	13.74	14.06
	3H	17.29	18.68	17.67	19.00	19.37	13.37	14.75	13.74	15.08	15.44
	4H	17.95	19.25	18.35	19.59	19.97	13.96	15.26	14.36	15.60	15.98
	6H	18.42	19.62	18.83	19.99	20.38	14.42	15.62	14.83	15.99	16.38
	8H	18.58	19.72	19.00	20.11	20.51	14.58	15.72	15.01	16.11	16.51
	12H	18.67	19.77	19.10	20.15	20.58	14.69	15.79	15.12	16.17	16.60
4H	2H	15.64	16.94	16.04	17.29	17.67	12.57	13.87	12.97	14.22	14.59
	3H	17.61	18.69	18.02	19.09	19.49	14.24	15.32	14.65	15.72	16.12
	4H	18.36	19.33	18.79	19.75	20.18	14.95	15.92	15.38	16.34	16.77
	6H	18.95	19.80	19.41	20.24	20.70	15.53	16.38	15.99	16.82	17.28
	8H	19.16	19.95	19.62	20.40	20.86	15.74	16.53	16.20	16.98	17.44
	12H	19.31	20.02	19.79	20.49	20.96	15.90	16.61	16.38	17.09	17.56
8H	4H	18.42	19.21	18.88	19.66	20.12	15.31	16.10	15.77	16.55	17.01
	6H	19.08	19.74	19.58	20.23	20.70	16.01	16.67	16.51	17.16	17.64
	8H	19.33	19.92	19.85	20.43	20.92	16.30	16.88	16.81	17.39	17.88
	12H	19.54	20.06	20.05	20.56	21.12	16.54	17.06	17.05	17.55	18.11
12H	4H	18.41	19.12	18.90	19.60	20.07	15.36	16.07	15.84	16.55	17.02
	6H	19.07	19.67	19.59	20.17	20.66	16.08	16.67	16.60	17.18	17.67
	8H	19.37	19.89	19.88	20.38	20.95	16.43	16.95	16.93	17.44	18.00