

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: P1056559

Luminaire Tested: S125R3DR-H375D927-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056559
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: S125R3DR-H375D927-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

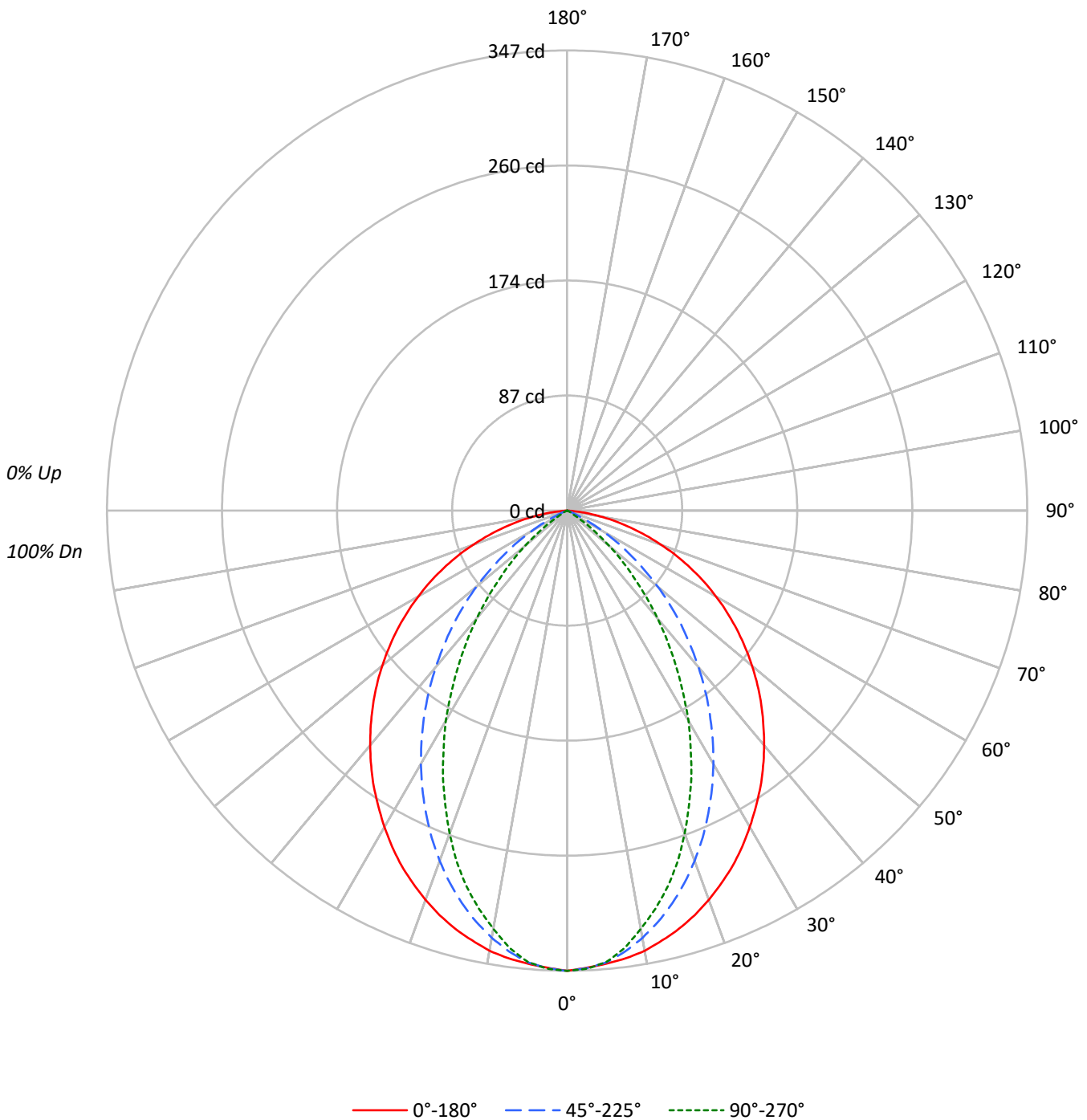
Lumens per Lamp: N/A
Luminaire Lumens: 562.5 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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°	2454	2454	2454
5°	2433	2426	2424
10°	2420	2348	2299
15°	2389	2243	2147
20°	2349	2114	1948
25°	2305	1964	1728
30°	2249	1800	1494
35°	2194	1618	1235
40°	2133	1422	977
45°	2070	1214	709
50°	2002	980	458
55°	1925	716	203
60°	1834	443	58
65°	1720	161	35
70°	1556	58	14
75°	1352	19	8
80°	1038	12	0
85°	470	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2070 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	5.7
10°-20°	86.6	15.4
20°-30°	117.1	20.8
30°-40°	120.3	21.4
40°-50°	99.7	17.7
50°-60°	64.0	11.4
60°-70°	30.9	5.5
70°-80°	10.4	1.9
80°-90°	1.3	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°	235.9	41.9
0°-40°	356.2	63.3
0°-60°	519.8	92.4
0°-90°	562.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	562.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	347	347	347	347	347	
5°	343	346	342	340	342	33
15°	326	322	306	296	293	92
25°	296	281	252	229	222	136
35°	254	230	188	155	143	159
45°	207	173	121	84	71	160
55°	156	114	58	26	16	140
65°	103	57	10	3	2	102
75°	50	11	1	0	0	53
85°	6	0	0	0	0	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	347.1	347.1	347.1	347.1	347.1
2.5°	345.0	347.7	345.3	345.0	345.7
5°	342.9	345.7	341.9	339.8	341.6
7.5°	340.5	341.9	335.4	331.9	332.6
10°	337.1	336.7	327.1	321.3	320.2
12.5°	331.9	330.2	317.5	309.2	307.5
15°	326.4	322.3	306.5	295.8	293.4
17.5°	319.9	313.3	294.4	280.7	277.2
20°	312.3	303.4	281.0	264.2	259.0
22.5°	304.1	292.7	266.9	247.0	240.1
25°	295.5	281.0	251.8	229.1	221.5
27.5°	285.8	269.0	236.6	210.8	201.6
30°	275.5	256.2	220.5	192.3	183.0
32.5°	264.8	243.5	204.3	173.7	162.3
35°	254.2	229.8	187.5	154.8	143.1
37.5°	242.8	216.0	170.9	136.9	124.2
40°	231.1	201.9	154.1	118.3	105.9
42.5°	219.1	187.5	137.2	100.8	88.1
45°	207.1	173.0	121.4	83.9	70.9
47.5°	194.7	158.2	104.9	67.4	56.1
50°	182.0	143.8	89.1	52.6	41.6
52.5°	169.2	129.0	72.9	38.2	28.2
55°	156.2	114.5	58.1	25.5	16.5
57.5°	143.1	99.7	44.4	14.1	6.2
60°	129.7	85.6	31.3	4.8	4.1
62.5°	116.6	70.5	19.6	3.8	3.1
65°	102.8	56.8	9.6	2.8	2.1
67.5°	89.4	43.7	4.1	1.7	1.0
70°	75.3	31.6	2.8	1.0	0.7
72.5°	62.3	20.3	1.7	0.7	0.3
75°	49.5	10.7	0.7	0.3	0.3
77.5°	37.1	4.5	0.3	0.3	0.3
80°	25.5	2.1	0.3	0.3	0.0
82.5°	15.1	0.7	0.3	0.3	0.0
85°	5.8	0.0	0.0	0.0	0.0
87.5°	0.3	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	14.18	15.57	14.55	15.88	16.20	0.00	0.44	0.00	0.75	1.06
	3H	15.73	16.96	16.11	17.29	17.66	0.00	0.20	0.00	0.53	0.89
	4H	16.26	17.40	16.66	17.75	18.13	0.00	0.05	0.00	0.40	0.78
	6H	16.60	17.65	17.01	18.02	18.41	0.00	0.00	0.00	0.25	0.65
	8H	16.68	17.68	17.11	18.07	18.47	0.00	0.00	0.00	0.18	0.58
	12H	16.70	17.65	17.13	18.03	18.46	0.00	0.00	0.00	0.09	0.52
4H	2H	13.99	15.13	14.39	15.48	15.86	0.00	1.05	0.31	1.40	1.79
	3H	15.60	16.54	16.01	16.94	17.34	0.00	0.79	0.27	1.19	1.60
	4H	16.12	16.96	16.56	17.38	17.82	0.00	0.61	0.21	1.03	1.47
	6H	16.50	17.22	16.96	17.66	18.13	0.00	0.43	0.17	0.87	1.34
	8H	16.60	17.27	17.07	17.72	18.19	0.00	0.33	0.13	0.78	1.25
	12H	16.63	17.23	17.12	17.71	18.18	0.00	0.21	0.10	0.69	1.17
8H	4H	16.00	16.67	16.47	17.11	17.58	0.80	1.47	1.27	1.92	2.39
	6H	16.35	16.90	16.85	17.40	17.88	0.72	1.26	1.22	1.76	2.24
	8H	16.45	16.94	16.97	17.45	17.95	0.66	1.15	1.18	1.67	2.16
	12H	16.49	16.93	17.00	17.42	17.99	0.62	1.06	1.13	1.55	2.12
12H	4H	15.95	16.55	16.44	17.03	17.50	0.88	1.47	1.37	1.96	2.43
	6H	16.29	16.79	16.81	17.30	17.79	0.78	1.27	1.30	1.79	2.28
	8H	16.41	16.84	16.92	17.34	17.91	0.74	1.18	1.26	1.67	2.24