

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: P1056561

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056561
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-H375D927-X4F0-XX-UDD-F-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

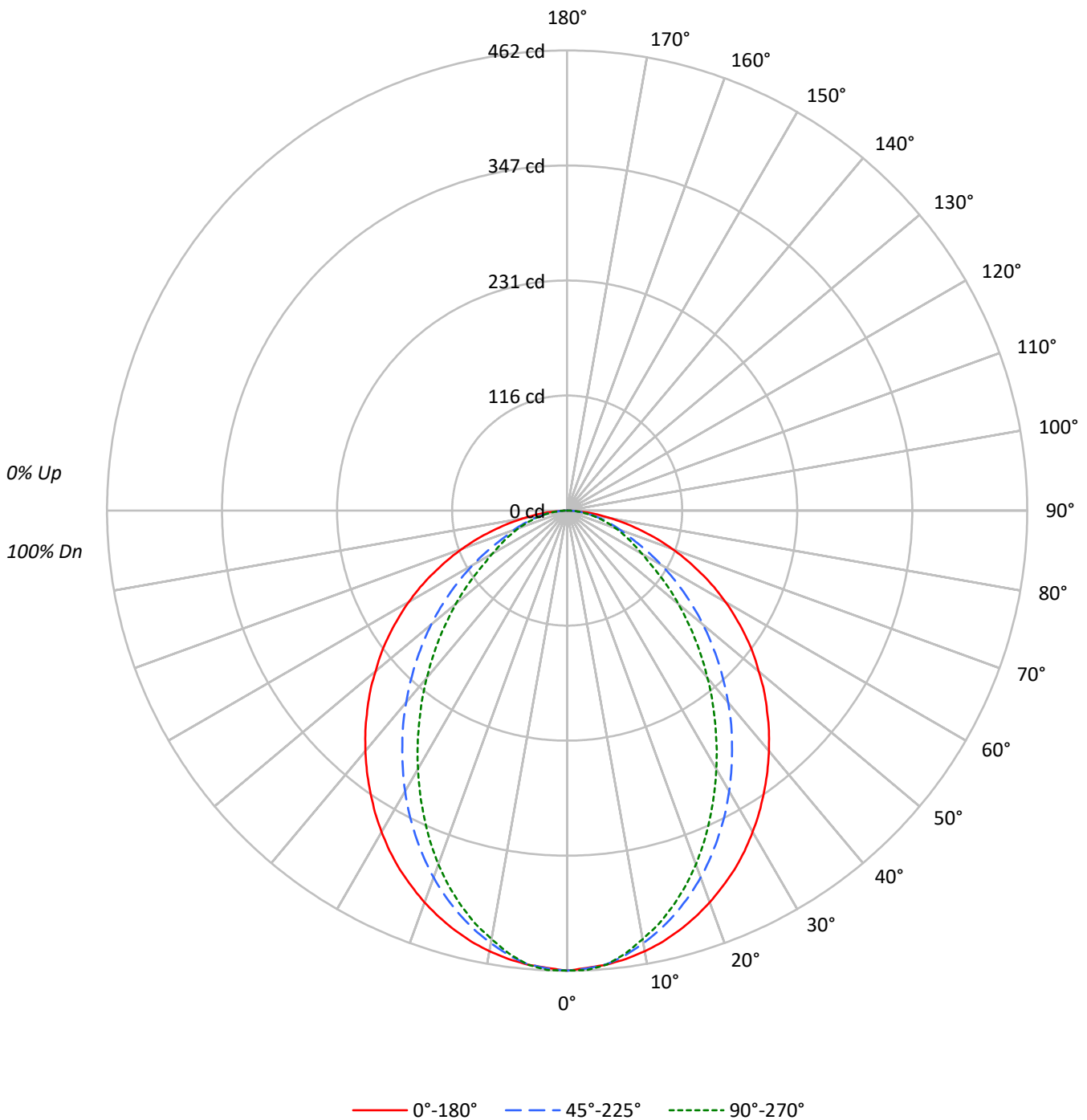
Lumens per Lamp: N/A
Luminaire Lumens: 979.1 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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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CATALOG NUMBER: S125R3DR-H375D927-X4F0-XX-UDD-F-W

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°	3265	3265	3265
5°	3247	3244	3247
10°	3225	3166	3136
15°	3192	3069	3006
20°	3149	2950	2844
25°	3101	2809	2650
30°	3041	2656	2446
35°	2974	2491	2233
40°	2908	2320	2022
45°	2837	2142	1813
50°	2762	1960	1603
55°	2692	1759	1395
60°	2597	1547	1226
65°	2469	1311	1139
70°	2317	1174	1067
75°	2095	1082	1005
80°	1820	981	936
85°	1419	868	868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	4.4
10°-20°	118.7	12.1
20°-30°	167.6	17.1
30°-40°	184.6	18.8
40°-50°	172.1	17.6
50°-60°	137.4	14.0
60°-70°	92.5	9.4
70°-80°	49.3	5.0
80°-90°	13.7	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°	329.5	33.7
0°-40°	514.1	52.5
0°-60°	823.6	84.1
0°-90°	979.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	458	461	457	456	458	43
15°	436	434	419	412	411	123
25°	398	386	360	344	340	183
35°	345	324	289	266	259	216
45°	284	257	214	188	181	219
55°	218	185	143	120	113	195
65°	148	115	78	70	68	146
75°	77	51	40	37	37	82
85°	18	12	11	11	11	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.9	461.9	461.9	461.9	461.9
2.5°	459.5	463.3	460.2	460.9	461.6
5°	457.5	461.2	457.1	455.7	457.5
7.5°	454.0	457.1	450.2	447.1	448.5
10°	449.2	451.3	441.0	436.8	436.8
12.5°	443.4	443.4	431.0	425.1	425.1
15°	436.1	433.7	419.3	412.1	410.7
17.5°	427.9	423.4	406.2	396.9	395.2
20°	418.6	411.4	392.1	380.1	378.0
22.5°	408.3	399.0	376.6	361.8	359.4
25°	397.6	385.6	360.1	344.3	339.8
27.5°	385.6	371.1	343.3	325.4	319.9
30°	372.5	356.0	325.4	305.4	299.6
32.5°	359.1	340.5	307.2	285.8	279.3
35°	344.6	324.4	288.6	265.9	258.7
37.5°	330.2	308.2	270.4	246.6	239.1
40°	315.1	291.0	251.4	227.0	219.1
42.5°	299.9	274.1	232.9	208.1	199.8
45°	283.8	256.9	214.3	188.1	181.3
47.5°	268.3	239.4	196.1	170.6	163.0
50°	251.1	221.2	178.2	152.7	145.8
52.5°	235.3	203.3	160.3	136.6	129.3
55°	218.4	185.4	142.7	120.0	113.2
57.5°	200.9	167.5	125.9	104.6	98.0
60°	183.7	149.6	109.4	89.8	86.7
62.5°	166.1	132.8	93.9	78.8	76.7
65°	147.6	115.2	78.4	69.5	68.1
67.5°	130.0	98.4	66.0	60.9	59.5
70°	112.1	81.5	56.8	52.3	51.6
72.5°	94.6	65.4	47.8	44.7	44.0
75°	76.7	50.9	39.6	37.1	36.8
77.5°	60.2	38.2	31.3	30.3	29.6
80°	44.7	28.5	24.1	23.4	23.0
82.5°	30.6	19.6	17.2	17.2	16.5
85°	17.5	12.0	10.7	11.0	10.7
87.5°	6.5	5.2	4.8	5.2	5.2
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	15.40	16.94	15.76	17.25	17.57	11.78	13.32	12.15	13.64	13.95
	3H	17.18	18.57	17.56	18.90	19.26	13.26	14.64	13.64	14.97	15.33
	4H	17.84	19.14	18.24	19.49	19.86	13.85	15.15	14.25	15.50	15.87
	6H	18.31	19.52	18.73	19.88	20.27	14.31	15.51	14.72	15.88	16.27
	8H	18.47	19.61	18.89	20.00	20.40	14.47	15.62	14.90	16.01	16.41
	12H	18.56	19.66	18.99	20.04	20.47	14.59	15.68	15.02	16.06	16.49
4H	2H	15.53	16.83	15.93	17.18	17.56	12.46	13.76	12.86	14.11	14.49
	3H	17.50	18.59	17.91	18.98	19.39	14.14	15.22	14.55	15.62	16.02
	4H	18.25	19.22	18.68	19.64	20.08	14.84	15.81	15.27	16.23	16.67
	6H	18.84	19.69	19.30	20.13	20.59	15.43	16.27	15.88	16.72	17.17
	8H	19.05	19.84	19.51	20.29	20.75	15.63	16.43	16.10	16.87	17.34
	12H	19.20	19.91	19.68	20.38	20.85	15.79	16.50	16.28	16.98	17.45
8H	4H	18.31	19.11	18.78	19.55	20.02	15.20	16.00	15.67	16.44	16.91
	6H	18.97	19.63	19.47	20.12	20.60	15.91	16.56	16.40	17.05	17.53
	8H	19.23	19.82	19.74	20.32	20.81	16.19	16.78	16.70	17.29	17.78
	12H	19.43	19.95	19.94	20.45	21.01	16.43	16.95	16.94	17.44	18.01
12H	4H	18.31	19.02	18.79	19.49	19.96	15.25	15.96	15.73	16.44	16.91
	6H	18.97	19.56	19.48	20.07	20.55	15.98	16.57	16.49	17.08	17.56
	8H	19.26	19.78	19.77	20.27	20.84	16.32	16.84	16.83	17.33	17.90