

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: P1056538

Luminaire Tested: S125R3DR-H1270D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056538
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-H1270D935-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

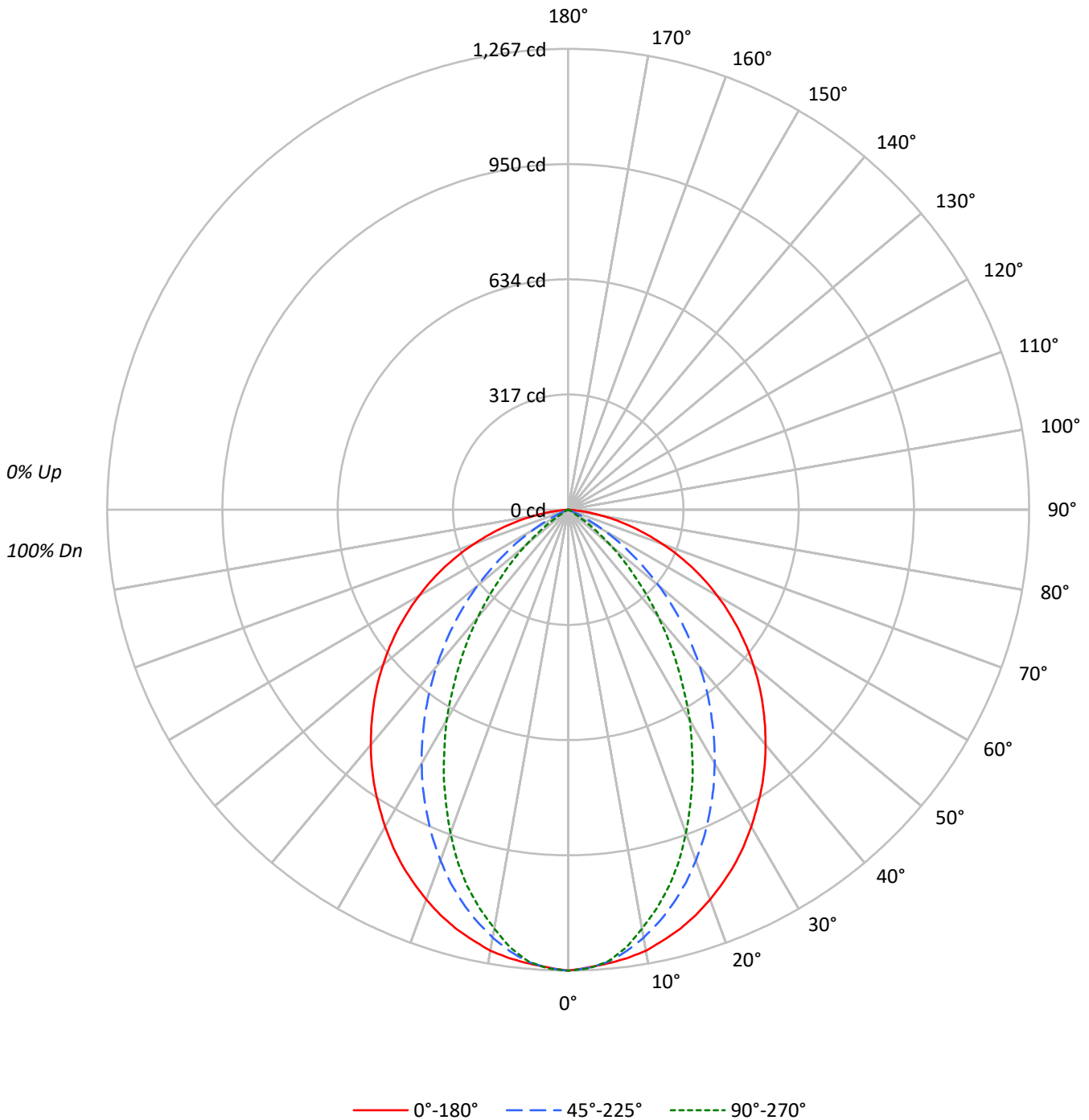
Lumens per Lamp: N/A
Luminaire Lumens: 2054.3 lumens
Efficiency: N/A
Efficacy: 56.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	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					100			
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61					61			
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55					55			
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49					49			
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45					45			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8960	8960	8960
5°	8887	8860	8851
10°	8837	8575	8394
15°	8724	8191	7842
20°	8580	7720	7115
25°	8416	7172	6310
30°	8213	6573	5454
35°	8011	5908	4509
40°	7790	5193	3570
45°	7560	4433	2587
50°	7308	3578	1672
55°	7029	2617	743
60°	6695	1616	213
65°	6283	589	125
70°	5686	207	52
75°	4941	68	36
80°	3786	53	0
85°	1736	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7560 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.7	5.7
10°-20°	316.1	15.4
20°-30°	427.6	20.8
30°-40°	439.3	21.4
40°-50°	363.9	17.7
50°-60°	233.7	11.4
60°-70°	112.9	5.5
70°-80°	38.2	1.9
80°-90°	4.9	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°	861.4	41.9
0°-40°	1300.7	63.3
0°-60°	1898.3	92.4
0°-90°	2054.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2054.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1267	1267	1267	1267	1267	
5°	1252	1262	1249	1241	1247	119
15°	1192	1177	1119	1080	1072	336
25°	1079	1026	920	837	809	497
35°	928	839	685	565	522	580
45°	756	632	443	306	259	583
55°	570	418	212	93	60	510
65°	376	207	35	10	8	372
75°	181	39	2	1	1	192
85°	21	0	0	0	0	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1267.4	1267.4	1267.4	1267.4	1267.4
2.5°	1259.9	1269.9	1261.1	1259.9	1262.4
5°	1252.3	1262.4	1248.6	1241.0	1247.3
7.5°	1243.5	1248.6	1224.7	1212.1	1214.6
10°	1231.0	1229.7	1194.5	1173.2	1169.4
12.5°	1212.1	1205.9	1159.4	1129.2	1123.0
15°	1192.0	1177.0	1119.2	1080.2	1071.5
17.5°	1168.2	1144.3	1075.2	1025.0	1012.4
20°	1140.5	1107.9	1026.2	964.7	945.8
22.5°	1110.4	1068.9	974.7	901.9	876.8
25°	1079.0	1026.2	919.5	836.6	808.9
27.5°	1043.8	982.3	864.2	770.0	736.1
30°	1006.1	935.8	805.2	702.2	668.2
32.5°	967.2	889.3	746.1	634.3	592.9
35°	928.3	839.1	684.6	565.2	522.5
37.5°	886.8	788.8	624.3	499.9	453.5
40°	844.1	737.3	562.7	432.1	386.9
42.5°	800.1	684.6	501.2	368.0	321.6
45°	756.2	631.8	443.4	306.5	258.8
47.5°	711.0	577.8	383.1	246.2	204.7
50°	664.5	525.0	325.3	192.2	152.0
52.5°	618.0	471.0	266.3	139.4	103.0
55°	570.3	418.3	212.3	93.0	60.3
57.5°	522.5	364.3	162.0	51.5	22.6
60°	473.5	312.8	114.3	17.6	15.1
62.5°	425.8	257.5	71.6	13.8	11.3
65°	375.6	207.3	35.2	10.0	7.5
67.5°	326.6	159.5	15.1	6.3	3.8
70°	275.1	115.6	10.0	3.8	2.5
72.5°	227.4	74.1	6.3	2.5	1.3
75°	180.9	38.9	2.5	1.3	1.3
77.5°	135.7	16.3	1.3	1.3	1.3
80°	93.0	7.5	1.3	1.3	0.0
82.5°	55.3	2.5	1.3	1.3	0.0
85°	21.4	0.0	0.0	0.0	0.0
87.5°	1.3	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	18.69	20.07	19.05	20.38	20.70	3.55	4.94	3.92	5.25	5.56
	3H	20.24	21.46	20.62	21.79	22.16	3.47	4.70	3.85	5.03	5.39
	4H	20.76	21.90	21.16	22.25	22.64	3.41	4.55	3.81	4.90	5.28
	6H	21.10	22.15	21.51	22.52	22.91	3.34	4.39	3.75	4.76	5.15
	8H	21.18	22.18	21.61	22.57	22.97	3.30	4.29	3.73	4.69	5.09
	12H	21.20	22.15	21.63	22.53	22.96	3.26	4.21	3.69	4.59	5.02
4H	2H	18.49	19.63	18.89	19.98	20.37	4.42	5.56	4.82	5.91	6.29
	3H	20.10	21.04	20.52	21.44	21.84	4.37	5.30	4.78	5.70	6.11
	4H	20.63	21.46	21.06	21.88	22.32	4.29	5.12	4.72	5.54	5.98
	6H	21.00	21.72	21.46	22.17	22.63	4.22	4.94	4.69	5.39	5.85
	8H	21.10	21.77	21.57	22.22	22.69	4.17	4.84	4.64	5.29	5.76
	12H	21.14	21.73	21.62	22.21	22.69	4.13	4.73	4.62	5.21	5.68
8H	4H	20.50	21.17	20.97	21.62	22.09	5.31	5.98	5.78	6.43	6.90
	6H	20.85	21.40	21.36	21.90	22.38	5.23	5.78	5.73	6.27	6.75
	8H	20.95	21.44	21.47	21.96	22.45	5.18	5.67	5.70	6.18	6.67
	12H	20.99	21.43	21.51	21.92	22.49	5.14	5.57	5.65	6.06	6.63
12H	4H	20.46	21.05	20.94	21.53	22.01	5.39	5.98	5.87	6.46	6.94
	6H	20.79	21.29	21.31	21.80	22.29	5.29	5.78	5.81	6.30	6.79
	8H	20.91	21.34	21.42	21.84	22.41	5.26	5.69	5.77	6.19	6.76