

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: P1217448

Luminaire Tested: S125DRP-H290D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217448
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2511-596-4)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H290D850-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

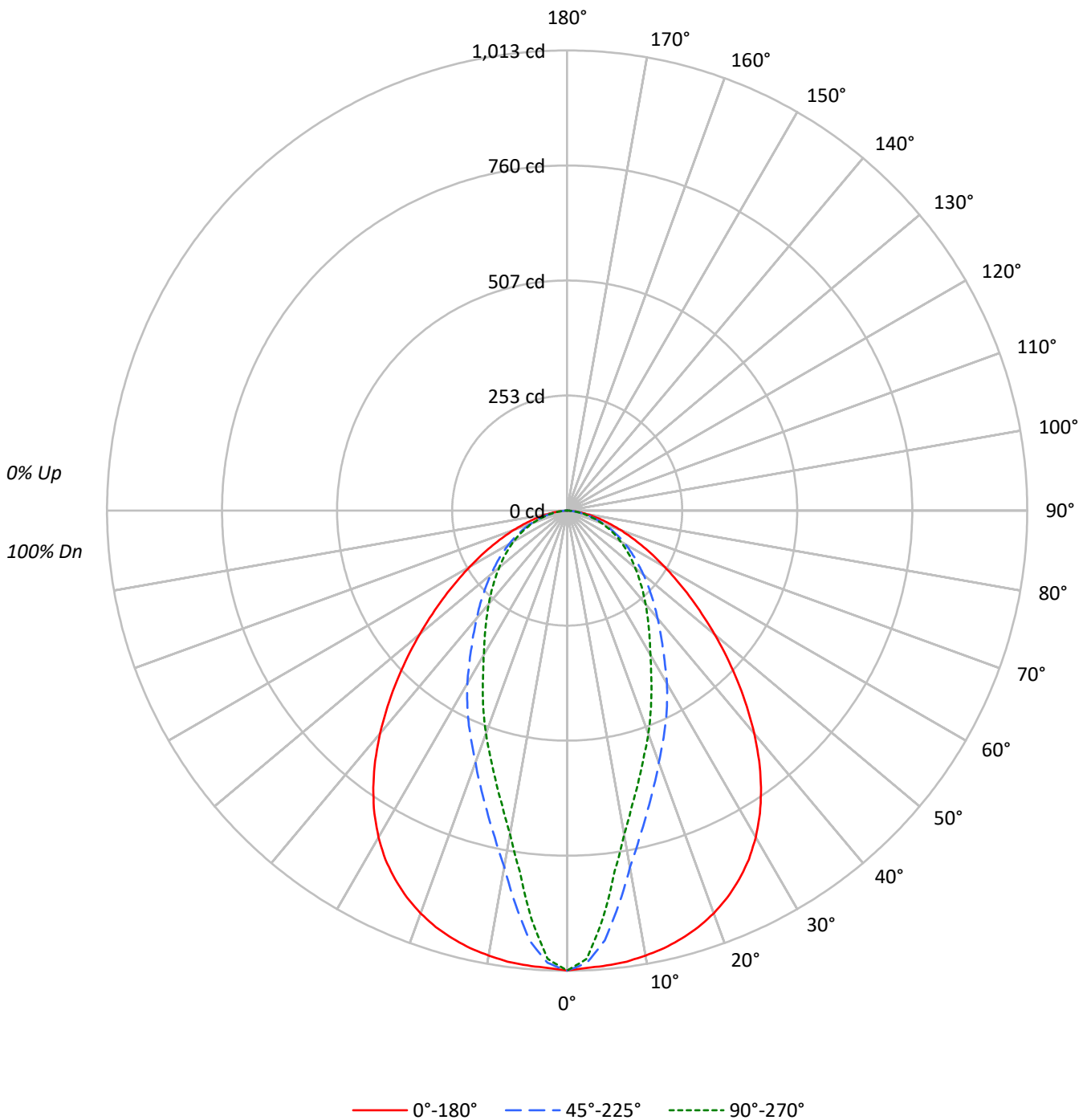
Lumens per Lamp: N/A
Luminaire Lumens: 1442.3 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): 120
Input Current (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	110	106	102	99	108	104	100	97	100	97	94	96	94	92	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	85	75	67	62	72	66	61	70	64	60	68	63	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	46
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37
9	62	49	42	37	60	49	41	36	48	41	36	47	40	36	46	40	36	34
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7158	7158	7158
5°	7133	6739	6399
10°	7139	5721	5192
15°	7136	5002	4472
20°	7098	4440	3931
25°	6987	4007	3425
30°	6779	3584	2993
35°	6422	3165	2705
40°	5914	2854	2478
45°	5298	2609	2294
50°	4655	2412	2147
55°	4046	2239	2029
60°	3494	2084	1920
65°	3009	1939	1807
70°	2577	1773	1668
75°	2152	1546	1480
80°	1698	1266	1225
85°	1087	868	868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5298 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	6.0
10°-20°	205.3	14.2
20°-30°	260.8	18.1
30°-40°	265.6	18.4
40°-50°	234.9	16.3
50°-60°	184.1	12.8
60°-70°	125.6	8.7
70°-80°	64.7	4.5
80°-90°	14.5	1.0
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°	552.9	38.3
0°-40°	818.5	56.8
0°-60°	1237.6	85.8
0°-90°	1442.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1442.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1005	1000	950	912	902	96
15°	975	825	683	623	611	275
25°	896	636	514	452	439	412
35°	744	481	367	320	313	463
45°	530	341	261	233	230	409
55°	328	228	182	165	165	295
65°	180	139	116	107	108	180
75°	79	66	57	53	54	85
85°	13	12	11	10	11	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.6	1012.6	1012.6	1012.6	1012.6
2.5°	1007.5	1015.4	996.4	991.3	987.6
5°	1005.2	1000.1	949.6	912.5	901.8
7.5°	1001.5	973.2	873.5	810.5	800.7
10°	994.5	931.0	797.0	735.3	723.3
12.5°	986.6	880.5	736.7	674.1	662.6
15°	975.1	824.8	683.4	622.7	611.1
17.5°	961.1	772.0	635.2	575.4	564.3
20°	943.5	723.8	590.2	533.7	522.5
22.5°	921.7	678.3	550.3	492.4	480.3
25°	895.8	636.1	513.7	452.5	439.1
27.5°	866.1	595.8	476.2	412.6	399.7
30°	830.4	556.4	439.1	377.4	366.7
32.5°	790.1	518.4	401.1	346.8	338.0
35°	744.2	481.3	366.7	320.4	313.4
37.5°	694.1	444.6	337.1	295.8	289.8
40°	640.8	408.9	309.3	273.1	268.5
42.5°	585.6	374.6	285.1	252.7	248.5
45°	529.9	340.8	261.0	232.8	229.5
47.5°	475.7	309.7	239.7	214.7	211.9
50°	423.3	280.5	219.3	197.1	195.2
52.5°	374.2	253.2	199.4	180.8	179.9
55°	328.3	227.7	181.7	165.1	164.6
57.5°	286.1	203.5	164.1	149.8	149.8
60°	247.1	180.8	147.4	134.9	135.8
62.5°	212.4	159.0	131.7	121.0	121.9
65°	179.9	138.6	115.9	107.1	108.0
67.5°	150.7	119.2	100.6	93.2	94.1
70°	124.7	100.6	85.8	79.3	80.7
72.5°	100.6	83.5	70.9	65.8	67.2
75°	78.8	66.3	56.6	52.9	54.2
77.5°	59.3	50.5	43.6	40.3	41.7
80°	41.7	36.2	31.1	28.7	30.1
82.5°	26.0	23.2	20.4	18.5	19.5
85°	13.4	12.5	10.7	9.7	10.7
87.5°	4.6	4.6	4.2	3.7	4.2
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	15.71	17.20	16.08	17.51	17.83	13.10	14.59	13.47	14.90	15.22
	3H	17.30	18.63	17.68	18.96	19.32	14.75	16.08	15.12	16.41	16.77
	4H	17.84	19.08	18.24	19.43	19.81	15.32	16.57	15.72	16.92	17.30
	6H	18.17	19.32	18.58	19.69	20.08	15.69	16.85	16.11	17.21	17.61
	8H	18.25	19.35	18.68	19.74	20.14	15.79	16.89	16.22	17.28	17.68
	12H	18.28	19.33	18.71	19.71	20.14	15.84	16.89	16.27	17.27	17.70
4H	2H	15.96	17.20	16.36	17.55	17.93	13.79	15.04	14.19	15.39	15.77
	3H	17.74	18.78	18.15	19.18	19.58	15.61	16.64	16.02	17.04	17.45
	4H	18.39	19.32	18.82	19.73	20.17	16.27	17.20	16.70	17.62	18.06
	6H	18.84	19.65	19.30	20.09	20.55	16.74	17.55	17.19	17.99	18.45
	8H	18.95	19.71	19.42	20.15	20.62	16.86	17.62	17.32	18.06	18.53
	12H	19.01	19.69	19.50	20.17	20.64	16.93	17.60	17.41	18.08	18.55
8H	4H	18.49	19.25	18.96	19.69	20.16	16.57	17.33	17.03	17.77	18.24
	6H	19.02	19.64	19.52	20.14	20.61	17.12	17.74	17.62	18.23	18.71
	8H	19.18	19.74	19.70	20.25	20.74	17.29	17.84	17.80	18.35	18.84
	12H	19.29	19.78	19.80	20.27	20.84	17.40	17.89	17.91	18.38	18.95
12H	4H	18.48	19.16	18.97	19.64	20.11	16.59	17.27	17.08	17.75	18.22
	6H	19.02	19.57	19.53	20.09	20.57	17.16	17.72	17.67	18.23	18.72
	8H	19.22	19.71	19.73	20.20	20.77	17.37	17.86	17.88	18.35	18.92