

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: P1217457

Luminaire Tested: S125DRP-H485D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217457
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-H485D850-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

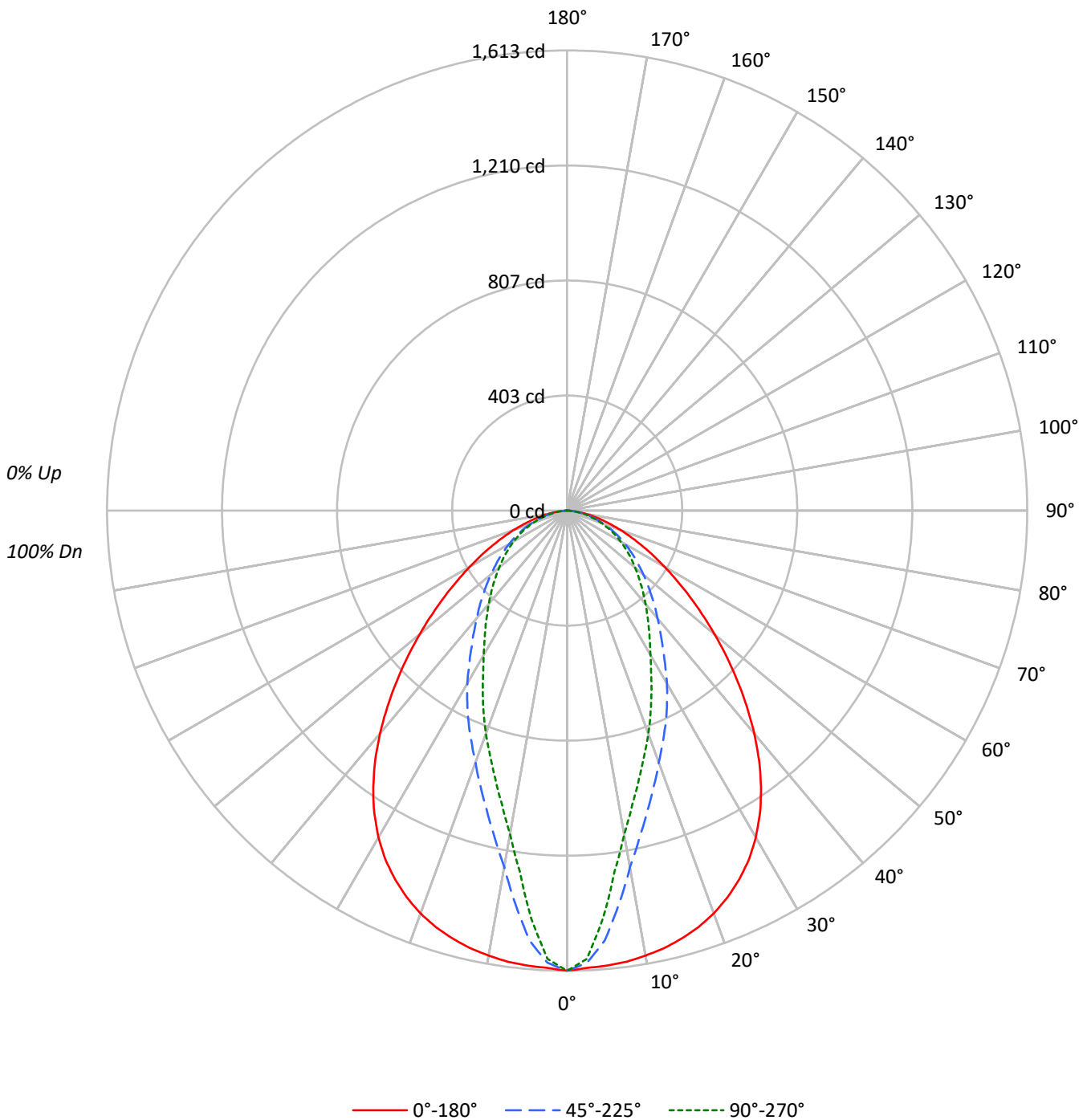
Lumens per Lamp: N/A
Luminaire Lumens: 2296.8 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 17.3
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

TEST NUMBER: P1217457

CATALOG NUMBER: S125DRP-H485D850-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217457

CATALOG NUMBER: S125DRP-H485D850-X4F0-XX-UDD-G-W

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°	11400	11400	11400
5°	11360	10731	10191
10°	11369	9111	8268
15°	11365	7965	7123
20°	11304	7071	6260
25°	11127	6381	5454
30°	10795	5708	4767
35°	10227	5040	4307
40°	9417	4545	3945
45°	8437	4156	3654
50°	7414	3840	3418
55°	6444	3567	3230
60°	5564	3320	3058
65°	4792	3088	2877
70°	4105	2823	2656
75°	3428	2461	2360
80°	2707	2015	1954
85°	1736	1379	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8437 cd/sqm



TEST NUMBER: P1217457

CATALOG NUMBER: S125DRP-H485D850-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	6.0
10°-20°	326.9	14.2
20°-30°	415.3	18.1
30°-40°	423.0	18.4
40°-50°	374.1	16.3
50°-60°	293.2	12.8
60°-70°	200.0	8.7
70°-80°	103.0	4.5
80°-90°	23.0	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°	880.5	38.3
0°-40°	1303.5	56.8
0°-60°	1970.8	85.8
0°-90°	2296.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2296.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1601	1593	1512	1453	1436	152
15°	1553	1314	1088	992	973	438
25°	1426	1013	818	721	699	656
35°	1185	766	584	510	499	738
45°	844	543	416	371	366	651
55°	523	362	289	263	262	470
65°	286	221	185	171	172	287
75°	126	106	90	84	86	135
85°	21	20	17	16	17	28
90°	0	0	0	0	0	



TEST NUMBER: P1217457

CATALOG NUMBER: S125DRP-H485D850-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1612.6	1612.6	1612.6	1612.6	1612.6
2.5°	1604.5	1617.0	1586.7	1578.6	1572.7
5°	1600.8	1592.6	1512.2	1453.1	1436.1
7.5°	1594.9	1549.8	1391.1	1290.7	1275.1
10°	1583.8	1482.6	1269.2	1171.0	1151.8
12.5°	1571.2	1402.1	1173.3	1073.6	1055.1
15°	1552.8	1313.5	1088.3	991.6	973.2
17.5°	1530.6	1229.4	1011.6	916.3	898.6
20°	1502.6	1152.6	939.9	849.9	832.1
22.5°	1467.9	1080.2	876.4	784.1	764.9
25°	1426.5	1013.0	818.1	720.6	699.2
27.5°	1379.3	948.8	758.3	657.1	636.5
30°	1322.4	886.0	699.2	601.0	584.0
32.5°	1258.2	825.5	638.7	552.3	538.3
35°	1185.1	766.4	584.0	510.2	499.1
37.5°	1105.3	708.1	536.8	471.1	461.5
40°	1020.4	651.2	492.5	434.9	427.5
42.5°	932.5	596.6	454.1	402.4	395.8
45°	843.9	542.7	415.7	370.7	365.5
47.5°	757.6	493.2	381.7	341.9	337.4
50°	674.1	446.7	349.2	313.8	310.8
52.5°	595.9	403.1	317.5	288.0	286.5
55°	522.8	362.5	289.4	262.9	262.1
57.5°	455.6	324.1	261.4	238.5	238.5
60°	393.5	288.0	234.8	214.9	216.3
62.5°	338.2	253.3	209.7	192.7	194.2
65°	286.5	220.8	184.6	170.6	172.0
67.5°	240.0	189.8	160.2	148.4	149.9
70°	198.6	160.2	136.6	126.3	128.5
72.5°	160.2	132.9	113.0	104.8	107.1
75°	125.5	105.6	90.1	84.2	86.4
77.5°	94.5	80.5	69.4	64.2	66.5
80°	66.5	57.6	49.5	45.8	48.0
82.5°	41.3	36.9	32.5	29.5	31.0
85°	21.4	19.9	17.0	15.5	17.0
87.5°	7.4	7.4	6.6	5.9	6.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217457
 CATALOG NUMBER: S125DRP-H485D850-X4F0-XX-UDD-G-W

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	17.33	18.82	17.70	19.13	19.44	14.72	16.20	15.08	16.52	16.83
	3H	18.92	20.25	19.30	20.58	20.94	16.36	17.69	16.74	18.02	18.38
	4H	19.45	20.70	19.85	21.05	21.43	16.94	18.19	17.34	18.53	18.91
	6H	19.79	20.94	20.20	21.31	21.70	17.31	18.46	17.72	18.83	19.22
	8H	19.87	20.97	20.30	21.36	21.76	17.41	18.50	17.83	18.89	19.30
	12H	19.90	20.95	20.33	21.33	21.76	17.45	18.50	17.88	18.88	19.31
4H	2H	17.57	18.82	17.97	19.17	19.55	15.40	16.65	15.80	17.00	17.38
	3H	19.36	20.39	19.77	20.79	21.19	17.22	18.26	17.63	18.66	19.06
	4H	20.00	20.93	20.44	21.35	21.79	17.89	18.82	18.32	19.24	19.68
	6H	20.46	21.27	20.91	21.71	22.17	18.35	19.16	18.81	19.61	20.07
	8H	20.57	21.33	21.03	21.77	22.24	18.48	19.23	18.94	19.68	20.15
	12H	20.63	21.31	21.11	21.78	22.26	18.55	19.22	19.03	19.70	20.17
8H	4H	20.11	20.87	20.57	21.31	21.78	18.19	18.94	18.65	19.39	19.85
	6H	20.64	21.26	21.14	21.75	22.23	18.74	19.36	19.23	19.85	20.33
	8H	20.80	21.36	21.32	21.87	22.36	18.90	19.46	19.42	19.97	20.46
	12H	20.91	21.40	21.42	21.89	22.46	19.02	19.51	19.53	20.00	20.57
12H	4H	20.10	20.78	20.58	21.25	21.73	18.21	18.88	18.69	19.36	19.83
	6H	20.63	21.19	21.15	21.70	22.19	18.77	19.33	19.29	19.84	20.33
	8H	20.83	21.33	21.34	21.82	22.38	18.99	19.48	19.50	19.97	20.54