

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: P1217502

Luminaire Tested: S125DRP-S485D850-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217502
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-S485D850-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

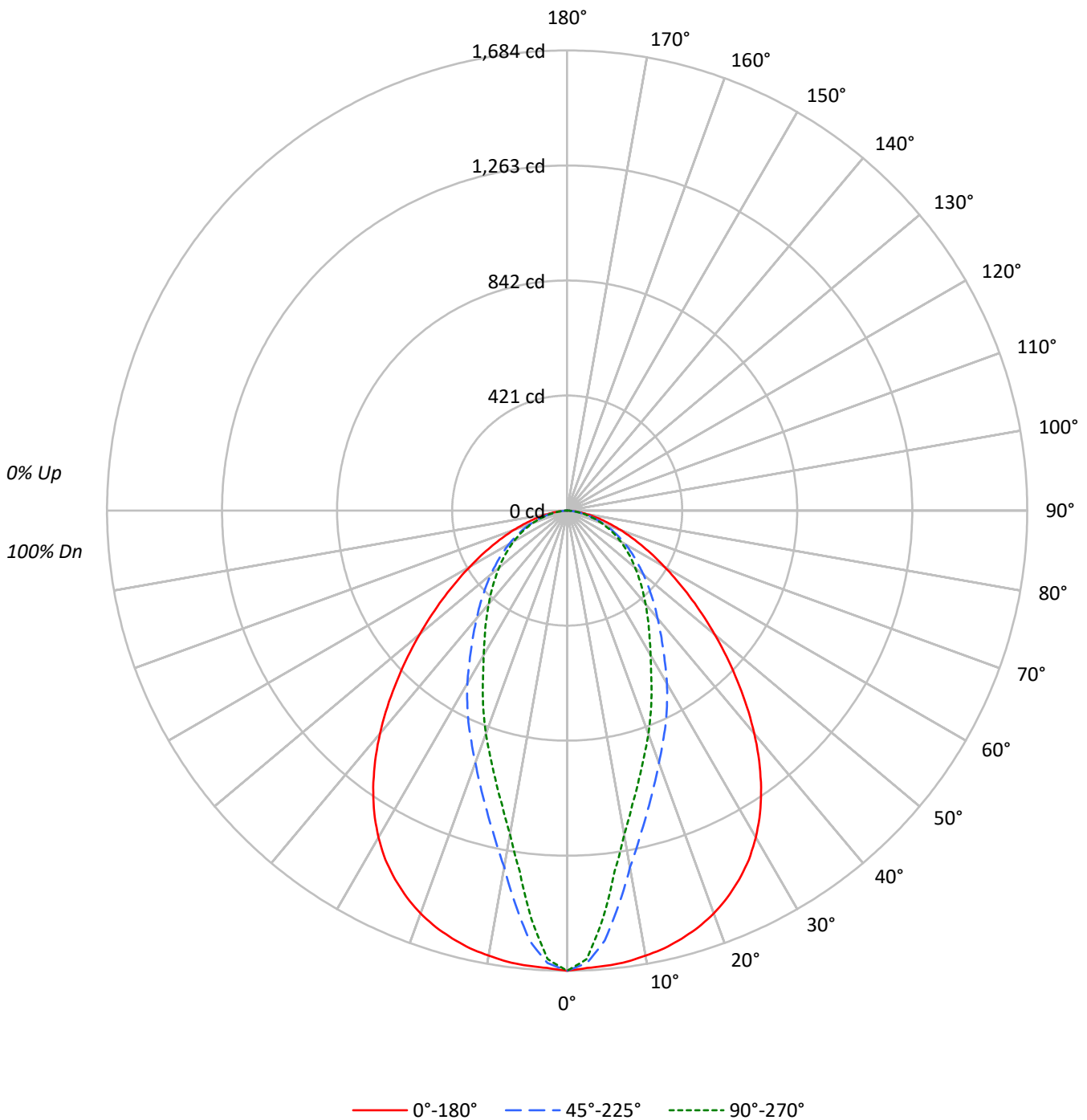
Lumens per Lamp: N/A
Luminaire Lumens: 2398.8 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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: P1217502

CATALOG NUMBER: S125DRP-S485D850-X4F0-XX-UDD-G-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	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°	11906	11906	11906
5°	11864	11207	10644
10°	11874	9516	8636
15°	11869	8319	7439
20°	11806	7385	6538
25°	11621	6664	5696
30°	11274	5961	4979
35°	10681	5264	4499
40°	9835	4746	4120
45°	8812	4340	3816
50°	7743	4011	3570
55°	6729	3726	3375
60°	5811	3467	3194
65°	5005	3225	3006
70°	4287	2950	2774
75°	3581	2570	2464
80°	2825	2105	2040
85°	1817	1436	1436

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8812 cd/sqm



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CATALOG NUMBER: S125DRP-S485D850-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	6.0
10°-20°	341.4	14.2
20°-30°	433.7	18.1
30°-40°	441.7	18.4
40°-50°	390.7	16.3
50°-60°	306.2	12.8
60°-70°	208.8	8.7
70°-80°	107.6	4.5
80°-90°	24.0	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°	919.6	38.3
0°-40°	1361.4	56.8
0°-60°	2058.3	85.8
0°-90°	2398.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2398.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1672	1663	1579	1518	1500	159
15°	1622	1372	1137	1036	1016	457
25°	1490	1058	854	753	730	685
35°	1238	800	610	533	521	770
45°	881	567	434	387	382	680
55°	546	379	302	274	274	491
65°	299	231	193	178	180	300
75°	131	110	94	88	90	141
85°	22	21	18	16	18	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1684.2	1684.2	1684.2	1684.2	1684.2
2.5°	1675.7	1688.8	1657.2	1648.7	1642.5
5°	1671.8	1663.3	1579.3	1517.6	1499.9
7.5°	1665.6	1618.6	1452.8	1347.9	1331.7
10°	1654.1	1548.4	1325.6	1223.0	1203.0
12.5°	1641.0	1464.4	1225.3	1121.2	1101.9
15°	1621.7	1371.8	1136.7	1035.6	1016.4
17.5°	1598.6	1283.9	1056.5	957.0	938.5
20°	1569.3	1203.7	981.7	887.6	869.1
22.5°	1533.0	1128.2	915.3	818.9	798.9
25°	1489.8	1058.0	854.4	752.6	730.3
27.5°	1440.5	990.9	792.0	686.3	664.7
30°	1381.1	925.4	730.3	627.7	610.0
32.5°	1314.0	862.1	667.0	576.8	562.2
35°	1237.7	800.4	610.0	532.9	521.3
37.5°	1154.4	739.5	560.6	492.0	482.0
40°	1065.7	680.1	514.3	454.2	446.5
42.5°	973.9	623.1	474.2	420.3	413.3
45°	881.4	566.8	434.1	387.1	381.7
47.5°	791.2	515.1	398.7	357.0	352.4
50°	704.0	466.5	364.7	327.7	324.6
52.5°	622.3	421.0	331.6	300.7	299.2
55°	546.0	378.6	302.3	274.5	273.8
57.5°	475.8	338.5	273.0	249.1	249.1
60°	411.0	300.7	245.2	224.4	225.9
62.5°	353.2	264.5	219.0	201.3	202.8
65°	299.2	230.6	192.8	178.1	179.7
67.5°	250.6	198.2	167.3	155.0	156.5
70°	207.4	167.3	142.7	131.9	134.2
72.5°	167.3	138.8	118.0	109.5	111.8
75°	131.1	110.3	94.1	87.9	90.2
77.5°	98.7	84.1	72.5	67.1	69.4
80°	69.4	60.1	51.7	47.8	50.1
82.5°	43.2	38.6	33.9	30.8	32.4
85°	22.4	20.8	17.7	16.2	17.7
87.5°	7.7	7.7	6.9	6.2	6.9
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	17.48	18.97	17.85	19.28	19.60	14.87	16.36	15.23	16.67	16.98
	3H	19.07	20.40	19.45	20.73	21.09	16.51	17.84	16.89	18.17	18.53
	4H	19.60	20.85	20.00	21.20	21.58	17.09	18.34	17.49	18.68	19.06
	6H	19.94	21.09	20.35	21.46	21.85	17.46	18.61	17.87	18.98	19.37
	8H	20.02	21.12	20.45	21.51	21.91	17.56	18.65	17.98	19.04	19.45
	12H	20.05	21.10	20.48	21.48	21.91	17.60	18.65	18.03	19.03	19.46
4H	2H	17.72	18.97	18.12	19.32	19.70	15.56	16.80	15.96	17.15	17.53
	3H	19.51	20.54	19.92	20.94	21.34	17.37	18.41	17.79	18.81	19.21
	4H	20.15	21.09	20.59	21.50	21.94	18.04	18.97	18.47	19.39	19.83
	6H	20.61	21.42	21.06	21.86	22.32	18.50	19.31	18.96	19.76	20.22
	8H	20.72	21.48	21.19	21.92	22.39	18.63	19.38	19.09	19.83	20.30
	12H	20.78	21.46	21.27	21.94	22.41	18.70	19.37	19.18	19.85	20.32
8H	4H	20.26	21.02	20.73	21.46	21.93	18.34	19.09	18.80	19.54	20.00
	6H	20.79	21.41	21.29	21.90	22.38	18.89	19.51	19.38	20.00	20.48
	8H	20.95	21.51	21.47	22.02	22.51	19.05	19.61	19.57	20.12	20.61
	12H	21.06	21.55	21.57	22.04	22.61	19.17	19.66	19.68	20.15	20.72
12H	4H	20.25	20.93	20.73	21.41	21.88	18.36	19.03	18.84	19.51	19.99
	6H	20.78	21.34	21.30	21.85	22.34	18.92	19.48	19.44	19.99	20.48
	8H	20.98	21.48	21.49	21.97	22.53	19.14	19.63	19.65	20.12	20.69