

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: P1217501

Luminaire Tested: S125DRP-S485D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217501
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-S485D840-X4F0-XX-UDD-G-W
Description: DEFINE 5, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

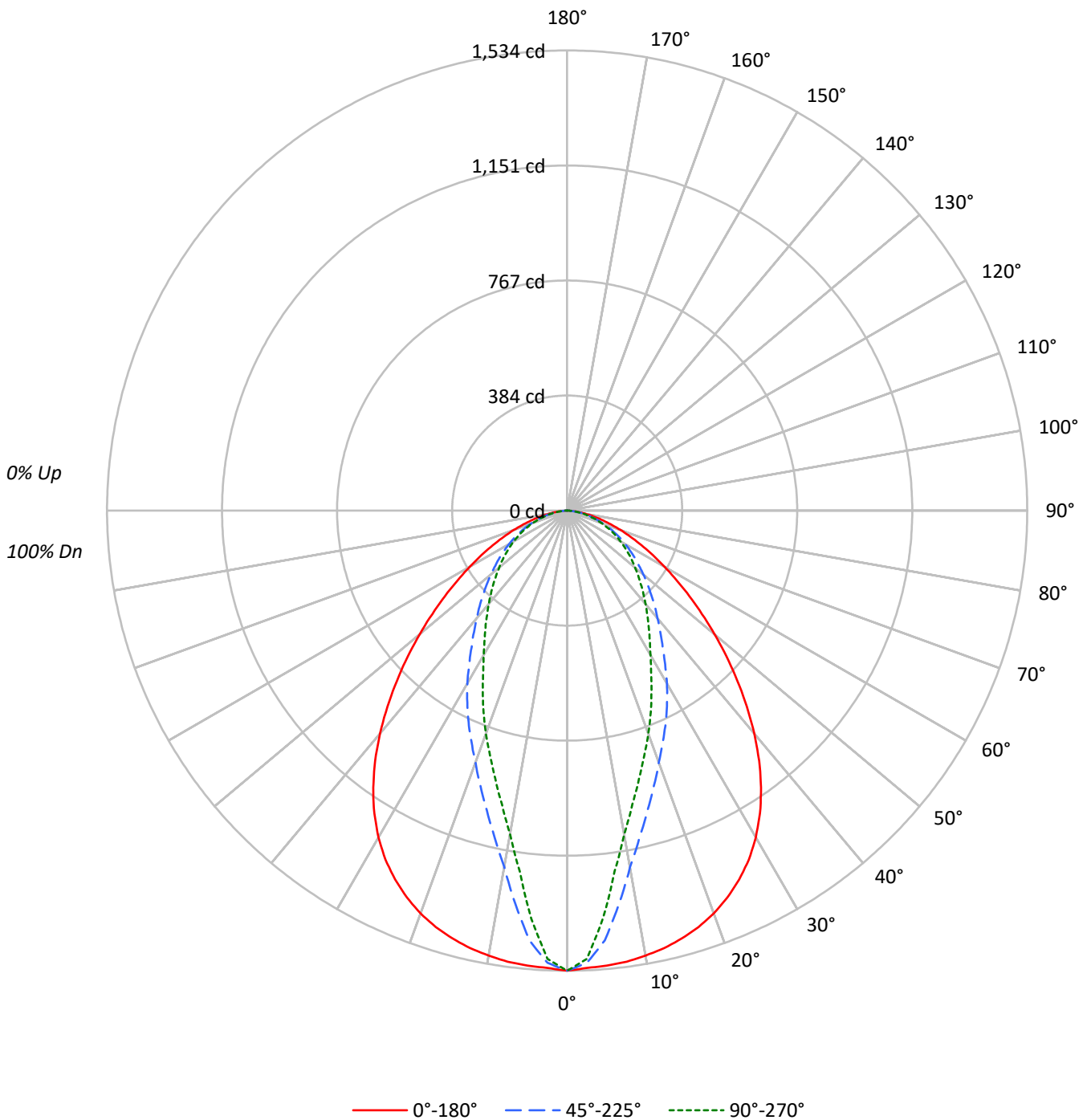
Lumens per Lamp: N/A
Luminaire Lumens: 2184.4 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1217501

CATALOG NUMBER: S125DRP-S485D840-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°	10842	10842	10842
5°	10803	10205	9692
10°	10812	8665	7863
15°	10808	7575	6773
20°	10750	6725	5954
25°	10582	6069	5187
30°	10266	5428	4534
35°	9726	4793	4097
40°	8955	4323	3752
45°	8024	3952	3475
50°	7051	3652	3251
55°	6128	3393	3073
60°	5292	3157	2908
65°	4558	2937	2737
70°	3904	2685	2526
75°	3261	2341	2245
80°	2573	1913	1856
85°	1655	1314	1314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8024 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	6.0
10°-20°	310.9	14.2
20°-30°	394.9	18.1
30°-40°	402.2	18.4
40°-50°	355.8	16.3
50°-60°	278.9	12.8
60°-70°	190.2	8.7
70°-80°	97.9	4.5
80°-90°	21.9	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°	837.4	38.3
0°-40°	1239.7	56.8
0°-60°	1874.3	85.8
0°-90°	2184.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2184.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1534	1534	1534	1534	1534	
5°	1522	1515	1438	1382	1366	145
15°	1477	1249	1035	943	926	417
25°	1357	963	778	685	665	623
35°	1127	729	555	485	475	701
45°	803	516	395	352	348	619
55°	497	345	275	250	249	447
65°	272	210	176	162	164	273
75°	119	100	86	80	82	129
85°	20	19	16	15	16	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1533.6	1533.6	1533.6	1533.6	1533.6
2.5°	1525.9	1537.8	1509.0	1501.3	1495.7
5°	1522.4	1514.6	1438.1	1381.9	1365.8
7.5°	1516.8	1473.9	1322.9	1227.4	1212.7
10°	1506.2	1410.0	1207.1	1113.7	1095.4
12.5°	1494.3	1333.5	1115.8	1021.0	1003.4
15°	1476.7	1249.2	1035.0	943.1	925.5
17.5°	1455.7	1169.2	962.0	871.4	854.6
20°	1429.0	1096.1	893.9	808.2	791.4
22.5°	1396.0	1027.3	833.5	745.7	727.5
25°	1356.7	963.4	778.0	685.3	665.0
27.5°	1311.7	902.3	721.2	625.0	605.3
30°	1257.6	842.6	665.0	571.6	555.4
32.5°	1196.6	785.1	607.4	525.2	511.9
35°	1127.0	728.9	555.4	485.2	474.7
37.5°	1051.2	673.4	510.5	448.0	438.9
40°	970.4	619.3	468.4	413.6	406.6
42.5°	886.9	567.4	431.9	382.7	376.4
45°	802.6	516.1	395.3	352.5	347.6
47.5°	720.5	469.1	363.0	325.1	320.9
50°	641.1	424.8	332.1	298.4	295.6
52.5°	566.7	383.4	301.9	273.9	272.5
55°	497.2	344.8	275.3	250.0	249.3
57.5°	433.3	308.3	248.6	226.8	226.8
60°	374.3	273.9	223.3	204.3	205.7
62.5°	321.6	240.9	199.4	183.3	184.7
65°	272.5	210.0	175.6	162.2	163.6
67.5°	228.2	180.5	152.4	141.1	142.5
70°	188.9	152.4	129.9	120.1	122.2
72.5°	152.4	126.4	107.4	99.7	101.8
75°	119.4	100.4	85.7	80.1	82.2
77.5°	89.9	76.5	66.0	61.1	63.2
80°	63.2	54.8	47.0	43.5	45.6
82.5°	39.3	35.1	30.9	28.1	29.5
85°	20.4	19.0	16.2	14.7	16.2
87.5°	7.0	7.0	6.3	5.6	6.3
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	17.16	18.64	17.52	18.96	19.27	14.54	16.03	14.91	16.34	16.66
	3H	18.74	20.08	19.12	20.40	20.77	16.19	17.52	16.56	17.85	18.21
	4H	19.28	20.53	19.68	20.88	21.26	16.76	18.01	17.16	18.36	18.74
	6H	19.62	20.77	20.03	21.14	21.53	17.14	18.29	17.55	18.66	19.05
	8H	19.69	20.79	20.12	21.18	21.58	17.23	18.33	17.66	18.72	19.12
	12H	19.73	20.78	20.16	21.16	21.59	17.28	18.33	17.71	18.71	19.14
4H	2H	17.40	18.65	17.80	19.00	19.38	15.23	16.48	15.63	16.83	17.21
	3H	19.18	20.22	19.59	20.62	21.02	17.05	18.08	17.46	18.48	18.89
	4H	19.83	20.76	20.26	21.18	21.62	17.71	18.65	18.15	19.06	19.50
	6H	20.28	21.09	20.74	21.53	21.99	18.18	18.99	18.64	19.43	19.89
	8H	20.40	21.15	20.86	21.60	22.06	18.30	19.06	18.77	19.50	19.97
	12H	20.46	21.13	20.94	21.61	22.08	18.37	19.05	18.86	19.53	20.00
8H	4H	19.94	20.69	20.40	21.14	21.60	18.01	18.77	18.48	19.21	19.68
	6H	20.47	21.09	20.96	21.58	22.06	18.56	19.18	19.06	19.68	20.15
	8H	20.63	21.18	21.14	21.69	22.18	18.73	19.29	19.24	19.80	20.29
	12H	20.73	21.22	21.24	21.72	22.28	18.84	19.33	19.35	19.83	20.39
12H	4H	19.93	20.60	20.41	21.08	21.55	18.04	18.71	18.52	19.19	19.66
	6H	20.46	21.02	20.97	21.53	22.02	18.60	19.16	19.11	19.67	20.16
	8H	20.66	21.15	21.17	21.64	22.21	18.81	19.30	19.32	19.80	20.36