

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: P1217519

Luminaire Tested: S125DRP-S865D840-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217519
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-S865D840-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

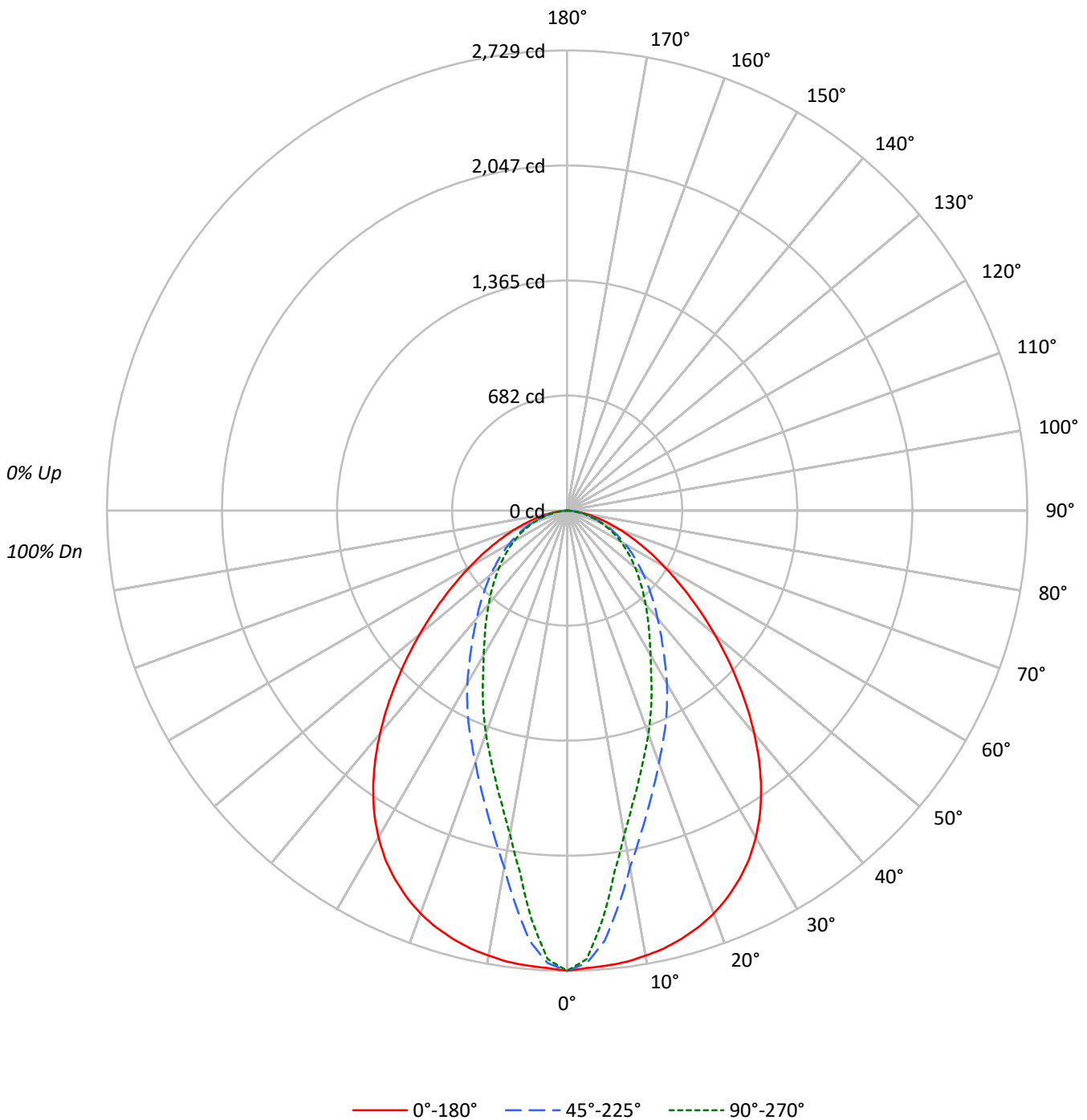
Lumens per Lamp: N/A
Luminaire Lumens: 3887.1 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.6 / 0.87
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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

TEST NUMBER: P1217519

CATALOG NUMBER: S125DRP-S865D840-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217519

CATALOG NUMBER: S125DRP-S865D840-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°	19293	19293	19293
5°	19225	18160	17247
10°	19240	15419	13993
15°	19233	13480	12053
20°	19130	11967	10595
25°	18831	10799	9230
30°	18269	9659	8068
35°	17308	8530	7290
40°	15936	7692	6677
45°	14280	7033	6183
50°	12548	6501	5786
55°	10904	6037	5467
60°	9416	5619	5176
65°	8109	5226	4871
70°	6947	4779	4494
75°	5801	4163	3993
80°	4580	3407	3306
85°	2936	2328	2328

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14280 cd/sqm



TEST NUMBER: P1217519

CATALOG NUMBER: S125DRP-S865D840-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.2	6.0
10°-20°	553.2	14.2
20°-30°	702.8	18.1
30°-40°	715.8	18.4
40°-50°	633.2	16.3
50°-60°	496.2	12.8
60°-70°	338.4	8.7
70°-80°	174.3	4.5
80°-90°	39.0	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°	1490.2	38.3
0°-40°	2206.0	56.8
0°-60°	3335.4	85.8
0°-90°	3887.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3887.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2729	2729	2729	2729	2729	
5°	2709	2695	2559	2459	2430	258
15°	2628	2223	1842	1678	1647	741
25°	2414	1714	1384	1220	1183	1109
35°	2006	1297	988	864	845	1248
45°	1428	918	704	627	618	1102
55°	885	614	490	445	444	796
65°	485	374	312	289	291	485
75°	212	179	152	142	146	229
85°	36	34	29	26	29	48
90°	0	0	0	0	0	



TEST NUMBER: P1217519

CATALOG NUMBER: S125DRP-S865D840-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2729.1	2729.1	2729.1	2729.1	2729.1
2.5°	2715.3	2736.6	2685.3	2671.6	2661.6
5°	2709.1	2695.3	2559.1	2459.2	2430.4
7.5°	2699.1	2622.9	2354.2	2184.3	2158.0
10°	2680.3	2509.2	2148.0	1981.8	1949.3
12.5°	2659.1	2372.9	1985.6	1816.9	1785.6
15°	2627.9	2223.0	1841.9	1678.2	1646.9
17.5°	2590.4	2080.5	1711.9	1550.7	1520.7
20°	2542.9	1950.6	1590.7	1438.3	1408.3
22.5°	2484.2	1828.1	1483.2	1327.1	1294.6
25°	2414.2	1714.4	1384.5	1219.6	1183.3
27.5°	2334.2	1605.7	1283.3	1112.1	1077.1
30°	2238.0	1499.5	1183.3	1017.2	988.4
32.5°	2129.3	1397.0	1080.9	934.7	910.9
35°	2005.6	1297.1	988.4	863.5	844.7
37.5°	1870.6	1198.3	908.4	797.2	781.0
40°	1726.9	1102.1	833.5	736.0	723.5
42.5°	1578.2	1009.7	768.5	681.0	669.8
45°	1428.3	918.4	703.5	627.3	618.5
47.5°	1282.1	834.7	646.0	578.6	571.1
50°	1140.9	756.0	591.1	531.1	526.1
52.5°	1008.4	682.3	537.3	487.3	484.8
55°	884.7	613.5	489.8	444.8	443.6
57.5°	771.0	548.6	442.4	403.6	403.6
60°	666.0	487.3	397.4	363.6	366.1
62.5°	572.3	428.6	354.9	326.1	328.6
65°	484.8	373.6	312.4	288.7	291.2
67.5°	406.1	321.1	271.2	251.2	253.7
70°	336.1	271.2	231.2	213.7	217.4
72.5°	271.2	224.9	191.2	177.4	181.2
75°	212.4	178.7	152.4	142.5	146.2
77.5°	159.9	136.2	117.5	108.7	112.5
80°	112.5	97.5	83.7	77.5	81.2
82.5°	70.0	62.5	55.0	50.0	52.5
85°	36.2	33.7	28.7	26.2	28.7
87.5°	12.5	12.5	11.2	10.0	11.2
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217519
 CATALOG NUMBER: S125DRP-S865D840-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	19.16	20.65	19.52	20.96	21.27	16.55	18.03	16.91	18.34	18.66
	3H	20.75	22.08	21.12	22.41	22.77	18.19	19.52	18.57	19.85	20.21
	4H	21.28	22.53	21.68	22.88	23.26	18.76	20.01	19.16	20.36	20.74
	6H	21.62	22.77	22.03	23.14	23.53	19.14	20.29	19.55	20.66	21.05
	8H	21.70	22.79	22.12	23.18	23.59	19.23	20.33	19.66	20.72	21.12
	12H	21.73	22.78	22.16	23.16	23.59	19.28	20.33	19.71	20.71	21.14
4H	2H	19.40	20.65	19.80	21.00	21.38	17.23	18.48	17.63	18.83	19.21
	3H	21.18	22.22	21.59	22.62	23.02	19.05	20.09	19.46	20.49	20.89
	4H	21.83	22.76	22.26	23.18	23.62	19.72	20.65	20.15	21.06	21.50
	6H	22.28	23.09	22.74	23.54	24.00	20.18	20.99	20.64	21.43	21.90
	8H	22.40	23.15	22.86	23.60	24.07	20.30	21.06	20.77	21.51	21.97
	12H	22.46	23.13	22.94	23.61	24.08	20.38	21.05	20.86	21.53	22.00
8H	4H	21.94	22.69	22.40	23.14	23.61	20.01	20.77	20.48	21.21	21.68
	6H	22.47	23.09	22.96	23.58	24.06	20.56	21.19	21.06	21.68	22.16
	8H	22.63	23.19	23.14	23.70	24.19	20.73	21.29	21.25	21.80	22.29
	12H	22.73	23.23	23.24	23.72	24.28	20.84	21.34	21.36	21.83	22.40
12H	4H	21.93	22.60	22.41	23.08	23.55	20.04	20.71	20.52	21.19	21.66
	6H	22.46	23.02	22.98	23.53	24.02	20.60	21.16	21.12	21.67	22.16
	8H	22.66	23.15	23.17	23.65	24.21	20.82	21.31	21.33	21.80	22.37