

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: P1217257

Luminaire Tested: S122DRP-H1005D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217257
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2511-596-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DRP-H1005D835-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

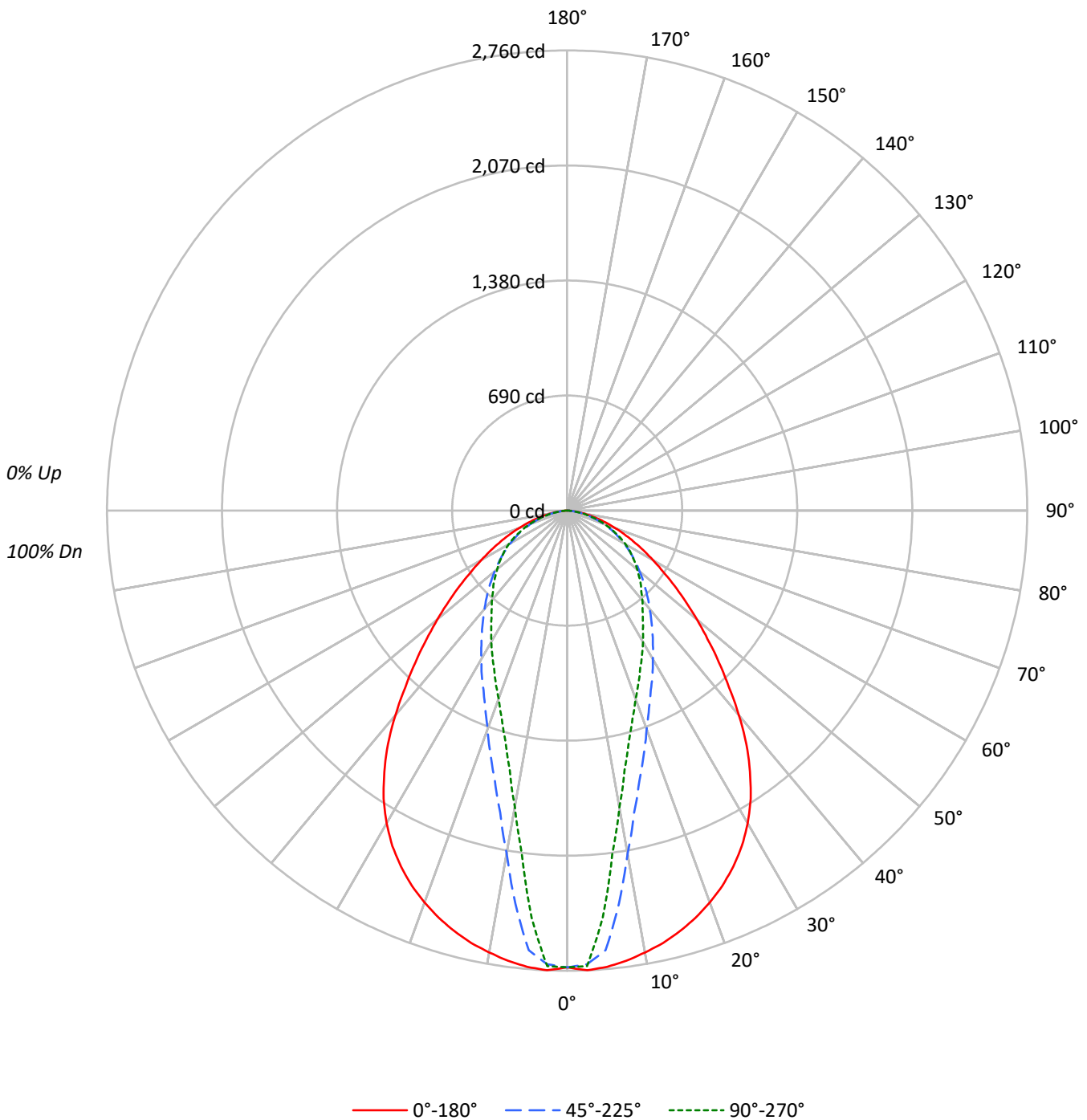
Lumens per Lamp: N/A
Luminaire Lumens: 3681.4 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	51904	51904	51904
5°	52237	50336	46612
10°	51770	40194	34752
15°	51240	32852	28058
20°	50423	28122	24202
25°	49263	24826	21718
30°	47396	22509	19914
35°	44224	20626	18311
40°	39655	19051	17354
45°	34499	17804	16733
50°	29949	16721	16131
55°	25916	15812	15719
60°	22474	14891	15323
65°	19667	13964	14480
70°	16939	12824	13300
75°	14121	11295	11720
80°	11074	9198	8892
85°	6826	5913	5913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 34499 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.9	6.4
10°-20°	520.1	14.1
20°-30°	638.1	17.3
30°-40°	659.5	17.9
40°-50°	595.6	16.2
50°-60°	482.6	13.1
60°-70°	338.3	9.2
70°-80°	174.5	4.7
80°-90°	36.8	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°	1394.1	37.9
0°-40°	2053.5	55.8
0°-60°	3131.8	85.1
0°-90°	3681.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2740	2740	2740	2740	2740	
5°	2747	2741	2647	2528	2451	260
15°	2612	2202	1675	1493	1430	736
25°	2357	1565	1188	1075	1039	1083
35°	1912	1156	892	816	792	1189
45°	1288	833	664	627	624	996
55°	785	570	479	473	476	707
65°	439	352	312	319	323	438
75°	193	166	154	159	160	208
85°	31	27	27	27	27	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2739.6	2739.6	2739.6	2739.6	2739.6
2.5°	2759.6	2749.6	2723.8	2748.1	2735.3
5°	2746.7	2741.0	2646.7	2528.1	2450.9
7.5°	2723.8	2703.8	2378.0	2153.6	2077.9
10°	2691.0	2590.9	2089.3	1880.7	1806.4
12.5°	2656.7	2420.9	1856.4	1660.6	1593.4
15°	2612.4	2202.2	1674.9	1493.4	1430.5
17.5°	2560.9	2012.2	1530.6	1356.2	1306.2
20°	2500.9	1847.8	1394.8	1241.9	1200.4
22.5°	2435.2	1709.2	1281.9	1157.6	1119.0
25°	2356.6	1564.9	1187.6	1074.7	1038.9
27.5°	2269.4	1454.8	1109.0	1003.2	973.2
30°	2166.5	1347.6	1028.9	934.6	910.3
32.5°	2049.3	1247.6	957.5	874.6	846.0
35°	1912.1	1156.1	891.8	816.0	791.7
37.5°	1766.4	1066.1	828.9	763.1	743.1
40°	1603.4	987.5	770.3	711.7	701.7
42.5°	1436.2	908.9	717.4	667.4	658.8
45°	1287.6	833.2	664.5	627.4	624.5
47.5°	1143.3	764.6	615.9	587.4	584.5
50°	1016.1	693.1	567.3	548.8	547.3
52.5°	894.6	630.2	521.6	511.6	514.5
55°	784.6	570.2	478.7	473.0	475.9
57.5°	683.1	514.5	435.9	437.3	441.6
60°	593.1	457.3	393.0	398.7	404.4
62.5°	514.5	404.4	351.6	360.1	365.8
65°	438.7	351.6	311.5	318.7	323.0
67.5°	371.6	301.5	271.5	280.1	281.5
70°	305.8	255.8	231.5	240.1	240.1
72.5°	248.7	208.6	192.9	197.2	198.6
75°	192.9	165.8	154.3	158.6	160.1
77.5°	145.8	125.8	117.2	121.5	120.0
80°	101.5	88.6	84.3	82.9	81.5
82.5°	62.9	55.7	51.4	52.9	51.4
85°	31.4	27.2	27.2	27.2	27.2
87.5°	10.0	10.0	10.0	10.0	10.0
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	22.22	23.72	22.58	24.03	24.35	20.72	22.22	21.08	22.53	22.84
	3H	23.81	25.15	24.18	25.48	25.84	22.43	23.78	22.81	24.10	24.47
	4H	24.33	25.59	24.73	25.94	26.32	23.01	24.27	23.41	24.62	25.00
	6H	24.66	25.82	25.07	26.19	26.58	23.36	24.52	23.77	24.89	25.28
	8H	24.73	25.84	25.16	26.23	26.63	23.43	24.54	23.86	24.93	25.33
	12H	24.76	25.82	25.19	26.20	26.63	23.46	24.53	23.89	24.91	25.34
4H	2H	22.53	23.79	22.93	24.14	24.52	21.28	22.54	21.68	22.89	23.27
	3H	24.31	25.36	24.72	25.76	26.16	23.19	24.24	23.60	24.64	25.04
	4H	24.94	25.88	25.37	26.30	26.74	23.89	24.83	24.32	25.25	25.69
	6H	25.37	26.19	25.83	26.64	27.10	24.34	25.16	24.80	25.60	26.06
	8H	25.48	26.25	25.94	26.69	27.16	24.44	25.21	24.91	25.65	26.12
	12H	25.53	26.21	26.01	26.69	27.16	24.50	25.18	24.98	25.66	26.13
8H	4H	25.09	25.85	25.55	26.30	26.77	24.13	24.90	24.59	25.34	25.81
	6H	25.60	26.23	26.09	26.72	27.20	24.67	25.30	25.17	25.79	26.27
	8H	25.74	26.31	26.26	26.82	27.31	24.82	25.38	25.33	25.89	26.38
	12H	25.83	26.33	26.34	26.82	27.39	24.91	25.41	25.42	25.90	26.47
12H	4H	25.09	25.77	25.57	26.25	26.72	24.14	24.82	24.62	25.30	25.77
	6H	25.60	26.16	26.11	26.67	27.16	24.69	25.25	25.20	25.76	26.25
	8H	25.78	26.28	26.29	26.77	27.34	24.88	25.38	25.39	25.87	26.44