

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: P1217263

Luminaire Tested: S122DRP-H1005D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217263
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-H1005D940-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

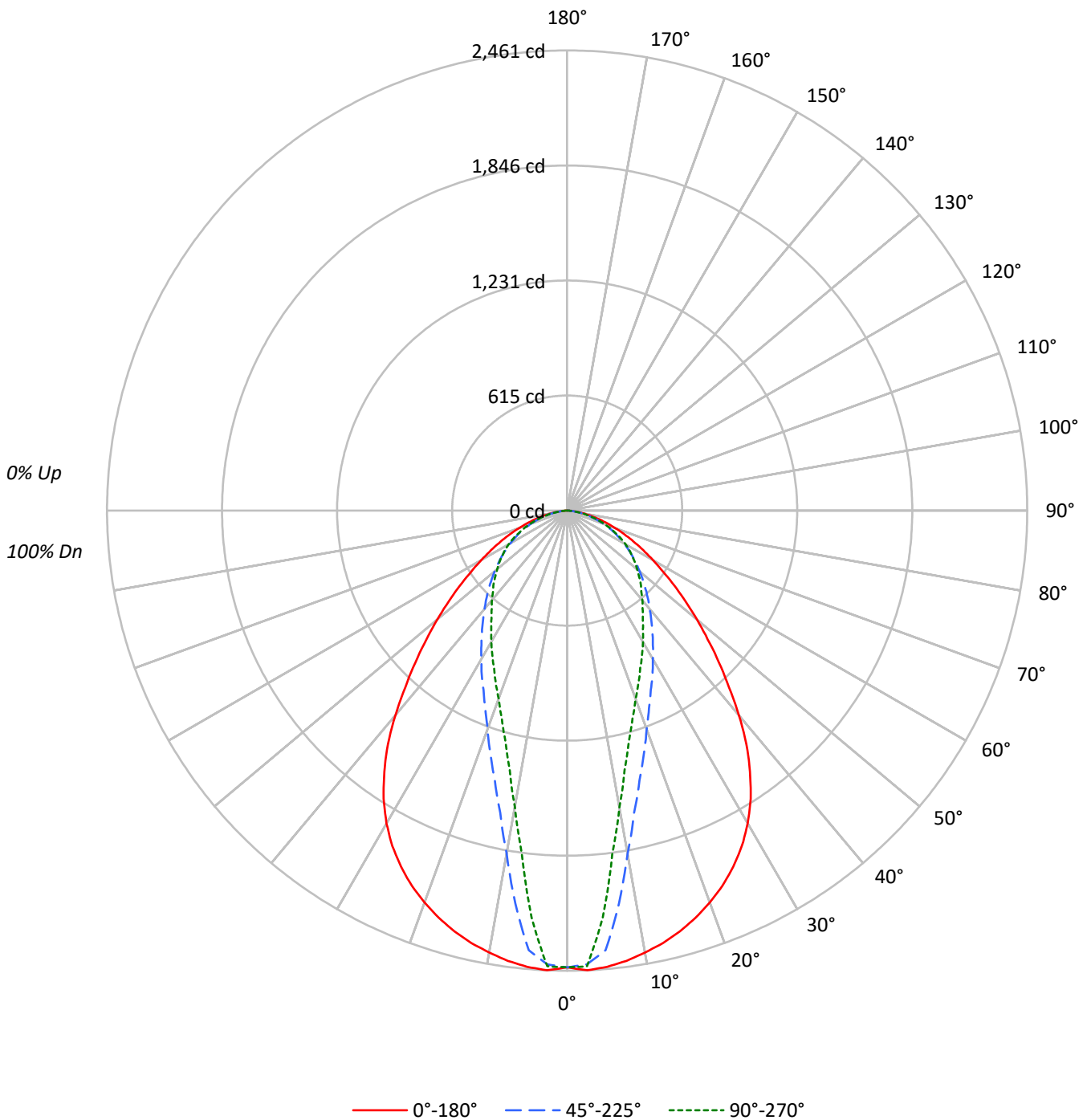
Lumens per Lamp: N/A
Luminaire Lumens: 3282.7 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	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					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°	46283	46283	46283
5°	46581	44885	41564
10°	46164	35843	30989
15°	45691	29294	25020
20°	44963	25075	21581
25°	43929	22138	19366
30°	42264	20072	17757
35°	39437	18392	16329
40°	35362	16988	15475
45°	30764	15878	14921
50°	26707	14911	14387
55°	23109	14101	14018
60°	20037	13277	13664
65°	17537	12454	12911
70°	15106	11433	11860
75°	12591	10072	10446
80°	9874	8205	7921
85°	6087	5261	5261

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30764 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.3	6.4
10°-20°	463.8	14.1
20°-30°	569.0	17.3
30°-40°	588.0	17.9
40°-50°	531.1	16.2
50°-60°	430.4	13.1
60°-70°	301.7	9.2
70°-80°	155.6	4.7
80°-90°	32.8	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°	1243.1	37.9
0°-40°	1831.2	55.8
0°-60°	2792.6	85.1
0°-90°	3282.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3282.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2443	2443	2443	2443	2443	
5°	2449	2444	2360	2254	2186	232
15°	2330	1964	1494	1332	1276	656
25°	2101	1395	1059	958	926	965
35°	1705	1031	795	728	706	1060
45°	1148	743	593	559	557	888
55°	700	508	427	422	424	630
65°	391	314	278	284	288	391
75°	172	148	138	142	143	186
85°	28	24	24	24	24	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2442.9	2442.9	2442.9	2442.9	2442.9
2.5°	2460.7	2451.8	2428.9	2450.5	2439.1
5°	2449.3	2444.2	2360.1	2254.3	2185.5
7.5°	2428.9	2411.0	2120.5	1920.4	1852.9
10°	2399.6	2310.4	1863.1	1677.0	1610.8
12.5°	2369.0	2158.7	1655.4	1480.8	1420.9
15°	2329.5	1963.7	1493.5	1331.7	1275.6
17.5°	2283.6	1794.3	1364.8	1209.3	1164.7
20°	2230.1	1647.7	1243.7	1107.4	1070.4
22.5°	2171.5	1524.1	1143.1	1032.2	997.8
25°	2101.4	1395.4	1059.0	958.3	926.4
27.5°	2023.6	1297.3	988.9	894.6	867.8
30°	1931.9	1201.7	917.5	833.4	811.7
32.5°	1827.4	1112.5	853.8	779.9	754.4
35°	1705.1	1030.9	795.2	727.6	706.0
37.5°	1575.1	950.7	739.1	680.5	662.7
40°	1429.8	880.6	686.9	634.6	625.7
42.5°	1280.7	810.5	639.7	595.1	587.5
45°	1148.2	742.9	592.6	559.4	556.9
47.5°	1019.5	681.8	549.2	523.8	521.2
50°	906.1	618.1	505.9	489.3	488.1
52.5°	797.7	562.0	465.1	456.2	458.8
55°	699.6	508.5	426.9	421.8	424.4
57.5°	609.1	458.8	388.7	389.9	393.8
60°	528.8	407.8	350.4	355.5	360.6
62.5°	458.8	360.6	313.5	321.1	326.2
65°	391.2	313.5	277.8	284.2	288.0
67.5°	331.3	268.9	242.1	249.8	251.0
70°	272.7	228.1	206.4	214.1	214.1
72.5°	221.7	186.1	172.0	175.9	177.1
75°	172.0	147.8	137.6	141.5	142.7
77.5°	130.0	112.1	104.5	108.3	107.0
80°	90.5	79.0	75.2	73.9	72.6
82.5°	56.1	49.7	45.9	47.2	45.9
85°	28.0	24.2	24.2	24.2	24.2
87.5°	8.9	8.9	8.9	8.9	8.9
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	21.82	23.32	22.19	23.63	23.95	20.32	21.82	20.68	22.13	22.45
	3H	23.41	24.75	23.79	25.08	25.44	22.03	23.38	22.41	23.71	24.07
	4H	23.93	25.19	24.33	25.54	25.92	22.61	23.87	23.01	24.22	24.60
	6H	24.26	25.42	24.67	25.79	26.18	22.96	24.13	23.37	24.49	24.88
	8H	24.33	25.44	24.76	25.83	26.23	23.04	24.14	23.46	24.53	24.94
	12H	24.36	25.42	24.79	25.80	26.23	23.07	24.13	23.50	24.51	24.94
4H	2H	22.13	23.39	22.53	23.74	24.12	20.88	22.14	21.28	22.49	22.87
	3H	23.91	24.96	24.32	25.36	25.76	22.80	23.84	23.21	24.24	24.65
	4H	24.54	25.48	24.97	25.90	26.34	23.49	24.43	23.92	24.85	25.29
	6H	24.98	25.79	25.43	26.24	26.70	23.94	24.76	24.40	25.21	25.67
	8H	25.08	25.85	25.54	26.29	26.76	24.05	24.81	24.51	25.26	25.72
	12H	25.13	25.82	25.62	26.29	26.77	24.10	24.78	24.58	25.26	25.73
8H	4H	24.69	25.46	25.15	25.90	26.37	23.73	24.50	24.20	24.94	25.41
	6H	25.20	25.83	25.69	26.32	26.80	24.27	24.90	24.77	25.39	25.87
	8H	25.34	25.91	25.86	26.42	26.91	24.42	24.98	24.93	25.49	25.98
	12H	25.43	25.93	25.94	26.42	26.99	24.52	25.01	25.03	25.51	26.07
12H	4H	24.69	25.37	25.17	25.85	26.32	23.74	24.43	24.23	24.90	25.38
	6H	25.20	25.77	25.71	26.28	26.76	24.29	24.86	24.80	25.37	25.85
	8H	25.38	25.88	25.89	26.37	26.94	24.48	24.98	24.99	25.47	26.04