

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: P1217272

Luminaire Tested: S122DRP-H290D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217272
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-H290D940-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

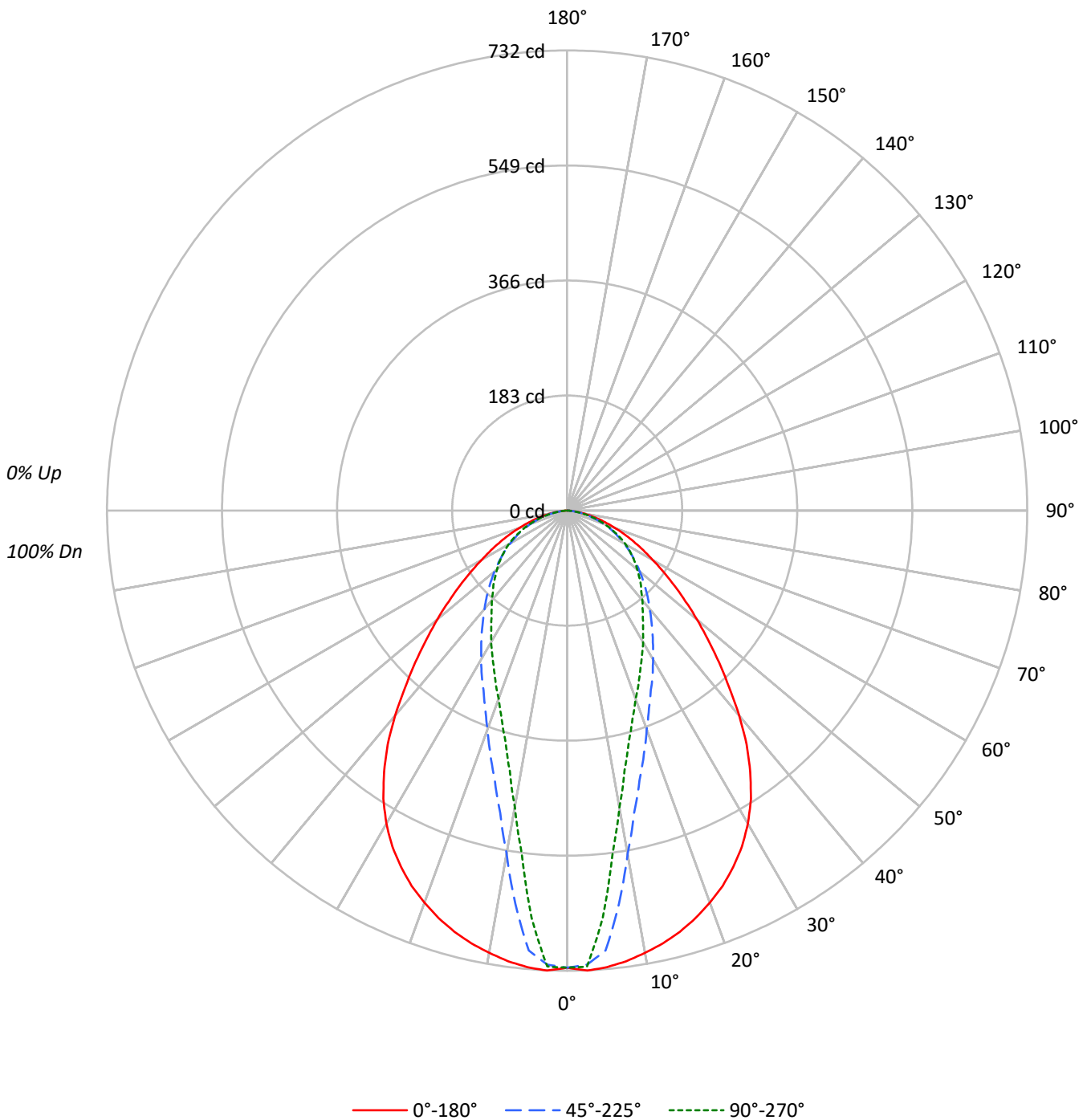
Lumens per Lamp: N/A
Luminaire Lumens: 977.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

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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°	13776	13776	13776
5°	13864	13358	12369
10°	13740	10668	9223
15°	13599	8719	7446
20°	13381	7464	6424
25°	13074	6589	5763
30°	12579	5975	5285
35°	11738	5475	4859
40°	10523	5055	4605
45°	9155	4726	4440
50°	7949	4439	4283
55°	6877	4198	4172
60°	5964	3952	4066
65°	5218	3707	3842
70°	4498	3401	3529
75°	3748	3001	3111
80°	2935	2444	2357
85°	1804	1565	1565

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9155 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	6.4
10°-20°	138.0	14.1
20°-30°	169.3	17.3
30°-40°	175.0	17.9
40°-50°	158.1	16.2
50°-60°	128.1	13.1
60°-70°	89.8	9.2
70°-80°	46.3	4.7
80°-90°	9.8	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°	370.0	37.9
0°-40°	545.0	55.8
0°-60°	831.1	85.1
0°-90°	977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	729	727	702	671	650	69
15°	693	584	444	396	380	195
25°	625	415	315	285	276	287
35°	508	307	237	217	210	315
45°	342	221	176	166	166	264
55°	208	151	127	126	126	188
65°	116	93	83	85	86	116
75°	51	44	41	42	42	55
85°	8	7	7	7	7	11
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	727.1	727.1	727.1	727.1	727.1
2.5°	732.4	729.7	722.9	729.3	725.9
5°	729.0	727.4	702.4	670.9	650.4
7.5°	722.9	717.6	631.1	571.6	551.5
10°	714.2	687.6	554.5	499.1	479.4
12.5°	705.1	642.5	492.7	440.7	422.9
15°	693.3	584.4	444.5	396.3	379.6
17.5°	679.6	534.0	406.2	359.9	346.6
20°	663.7	490.4	370.2	329.6	318.6
22.5°	646.3	453.6	340.2	307.2	297.0
25°	625.4	415.3	315.2	285.2	275.7
27.5°	602.3	386.1	294.3	266.2	258.3
30°	575.0	357.6	273.1	248.0	241.6
32.5°	543.9	331.1	254.1	232.1	224.5
35°	507.5	306.8	236.7	216.6	210.1
37.5°	468.8	282.9	220.0	202.5	197.2
40°	425.5	262.1	204.4	188.9	186.2
42.5°	381.2	241.2	190.4	177.1	174.8
45°	341.7	221.1	176.4	166.5	165.7
47.5°	303.4	202.9	163.5	155.9	155.1
50°	269.7	183.9	150.6	145.6	145.3
52.5°	237.4	167.3	138.4	135.8	136.5
55°	208.2	151.3	127.1	125.5	126.3
57.5°	181.3	136.5	115.7	116.1	117.2
60°	157.4	121.4	104.3	105.8	107.3
62.5°	136.5	107.3	93.3	95.6	97.1
65°	116.4	93.3	82.7	84.6	85.7
67.5°	98.6	80.0	72.1	74.3	74.7
70°	81.2	67.9	61.4	63.7	63.7
72.5°	66.0	55.4	51.2	52.3	52.7
75°	51.2	44.0	41.0	42.1	42.5
77.5°	38.7	33.4	31.1	32.2	31.9
80°	26.9	23.5	22.4	22.0	21.6
82.5°	16.7	14.8	13.7	14.0	13.7
85°	8.3	7.2	7.2	7.2	7.2
87.5°	2.7	2.7	2.7	2.7	2.7
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	17.61	19.11	17.97	19.42	19.74	16.11	17.61	16.48	17.92	18.24
	3H	19.20	20.54	19.57	20.87	21.23	17.82	19.17	18.20	19.50	19.86
	4H	19.72	20.98	20.12	21.33	21.71	18.40	19.66	18.80	20.01	20.39
	6H	20.05	21.21	20.46	21.58	21.97	18.75	19.92	19.16	20.28	20.67
	8H	20.12	21.23	20.55	21.62	22.02	18.83	19.94	19.25	20.33	20.73
	12H	20.15	21.21	20.58	21.59	22.02	18.86	19.92	19.29	20.30	20.73
4H	2H	17.92	19.18	18.32	19.53	19.91	16.67	17.93	17.07	18.28	18.66
	3H	19.70	20.75	20.11	21.15	21.55	18.58	19.63	19.00	20.03	20.43
	4H	20.33	21.27	20.76	21.69	22.13	19.28	20.22	19.71	20.64	21.08
	6H	20.76	21.58	21.22	22.03	22.49	19.73	20.55	20.19	20.99	21.46
	8H	20.87	21.64	21.33	22.08	22.55	19.84	20.60	20.30	21.05	21.51
	12H	20.92	21.60	21.40	22.08	22.55	19.89	20.57	20.37	21.05	21.52
8H	4H	20.48	21.25	20.94	21.69	22.16	19.52	20.29	19.98	20.73	21.20
	6H	20.99	21.62	21.48	22.11	22.59	20.06	20.69	20.56	21.18	21.66
	8H	21.13	21.70	21.65	22.21	22.70	20.21	20.77	20.72	21.28	21.77
	12H	21.22	21.72	21.73	22.21	22.78	20.30	20.80	20.81	21.29	21.86
12H	4H	20.48	21.16	20.96	21.64	22.11	19.53	20.22	20.02	20.69	21.17
	6H	20.99	21.55	21.50	22.06	22.55	20.08	20.65	20.59	21.16	21.64
	8H	21.17	21.67	21.68	22.16	22.73	20.27	20.77	20.78	21.26	21.83