

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: P1217316

Luminaire Tested: S122DRP-S290D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217316
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-S290D935-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

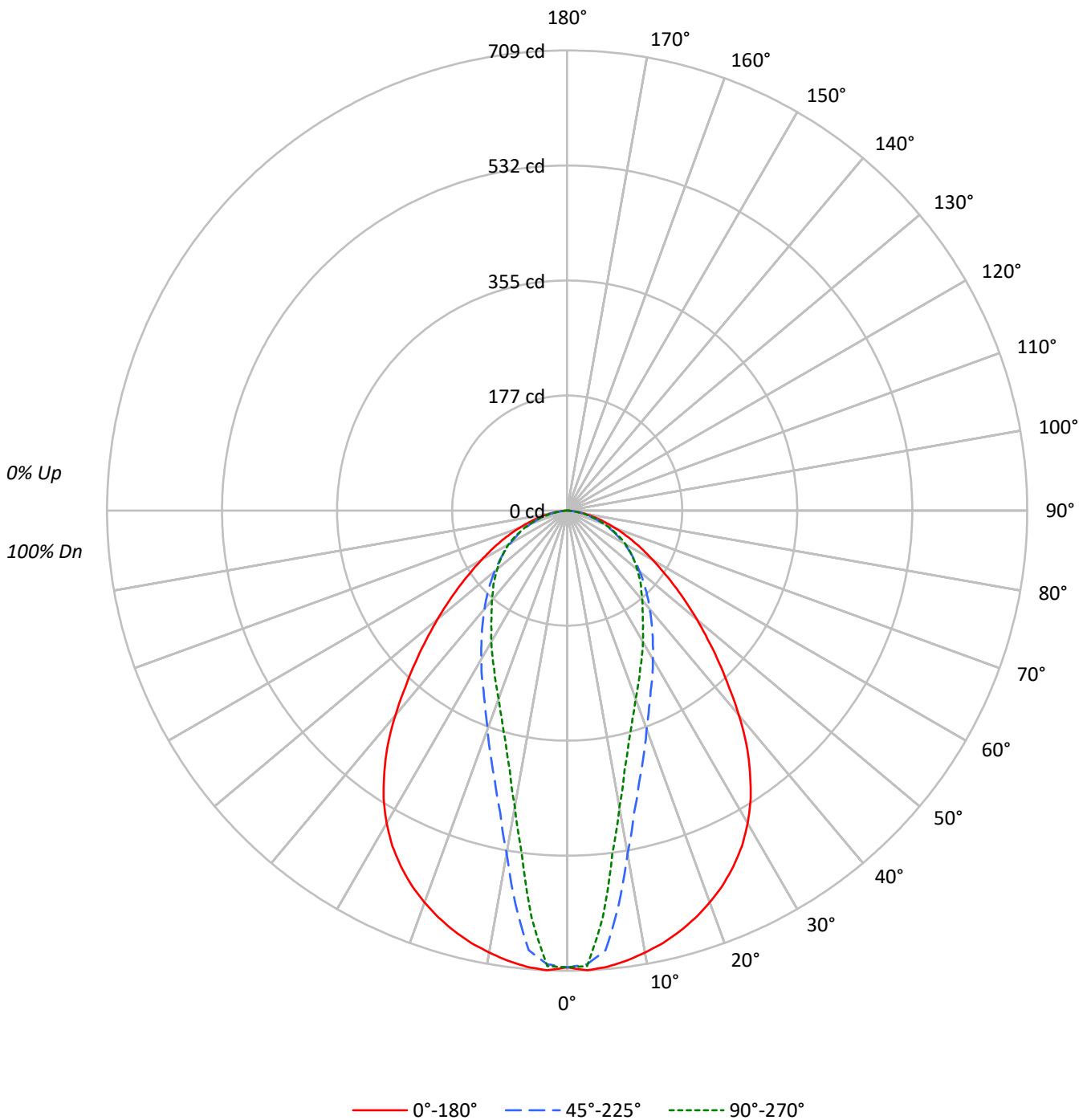
Lumens per Lamp: N/A
Luminaire Lumens: 945.7 lumens
Efficiency: N/A
Efficacy: 75.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75					75			
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65					65			
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57					57			
5	80	69	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50					50			
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41					41			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	43	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13332	13332	13332
5°	13419	12930	11974
10°	13299	10325	8926
15°	13163	8438	7208
20°	12952	7224	6218
25°	12656	6378	5579
30°	12174	5782	5115
35°	11361	5299	4704
40°	10187	4894	4457
45°	8863	4574	4298
50°	7693	4294	4144
55°	6656	4063	4036
60°	5771	3827	3937
65°	5052	3586	3721
70°	4354	3296	3418
75°	3631	2899	3009
80°	2848	2368	2280
85°	1761	1522	1522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8863 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	6.4
10°-20°	133.6	14.1
20°-30°	163.9	17.3
30°-40°	169.4	17.9
40°-50°	153.0	16.2
50°-60°	124.0	13.1
60°-70°	86.9	9.2
70°-80°	44.8	4.7
80°-90°	9.5	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°	358.1	37.9
0°-40°	527.5	55.8
0°-60°	804.5	85.1
0°-90°	945.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	945.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	706	704	680	649	630	67
15°	671	566	430	384	368	189
25°	605	402	305	276	267	278
35°	491	297	229	210	203	305
45°	331	214	171	161	160	256
55°	202	146	123	122	122	182
65°	113	90	80	82	83	113
75°	50	43	40	41	41	54
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°	703.7	703.7	703.7	703.7	703.7
2.5°	708.9	706.3	699.7	705.9	702.6
5°	705.6	704.1	679.9	649.4	629.6
7.5°	699.7	694.6	610.9	553.2	533.8
10°	691.3	665.6	536.7	483.1	464.0
12.5°	682.4	621.9	476.9	426.6	409.3
15°	671.1	565.7	430.2	383.6	367.5
17.5°	657.8	516.9	393.2	348.4	335.5
20°	642.4	474.7	358.3	319.0	308.4
22.5°	625.5	439.1	329.3	297.4	287.4
25°	605.4	402.0	305.1	276.1	266.9
27.5°	583.0	373.7	284.9	257.7	250.0
30°	556.5	346.2	264.3	240.1	233.8
32.5°	526.4	320.5	246.0	224.7	217.3
35°	491.2	297.0	229.1	209.6	203.4
37.5°	453.7	273.9	212.9	196.0	190.9
40°	411.9	253.7	197.9	182.8	180.2
42.5°	368.9	233.5	184.3	171.4	169.2
45°	330.8	214.0	170.7	161.2	160.4
47.5°	293.7	196.4	158.2	150.9	150.1
50°	261.0	178.0	145.7	141.0	140.6
52.5°	229.8	161.9	134.0	131.4	132.2
55°	201.5	146.5	123.0	121.5	122.2
57.5°	175.5	132.2	112.0	112.3	113.4
60°	152.3	117.5	101.0	102.4	103.9
62.5°	132.2	103.9	90.3	92.5	94.0
65°	112.7	90.3	80.0	81.9	83.0
67.5°	95.4	77.5	69.7	72.0	72.3
70°	78.6	65.7	59.5	61.7	61.7
72.5°	63.9	53.6	49.6	50.7	51.0
75°	49.6	42.6	39.6	40.7	41.1
77.5°	37.4	32.3	30.1	31.2	30.8
80°	26.1	22.8	21.7	21.3	20.9
82.5°	16.2	14.3	13.2	13.6	13.2
85°	8.1	7.0	7.0	7.0	7.0
87.5°	2.6	2.6	2.6	2.6	2.6
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	17.50	19.00	17.86	19.31	19.63	15.99	17.49	16.36	17.81	18.12
	3H	19.08	20.43	19.46	20.76	21.12	17.71	19.05	18.09	19.38	19.74
	4H	19.61	20.87	20.01	21.22	21.60	18.29	19.55	18.69	19.90	20.28
	6H	19.94	21.10	20.35	21.47	21.86	18.63	19.80	19.05	20.17	20.56
	8H	20.01	21.12	20.44	21.51	21.91	18.71	19.82	19.14	20.21	20.61
	12H	20.04	21.10	20.47	21.48	21.91	18.74	19.80	19.17	20.18	20.61
4H	2H	17.81	19.07	18.21	19.42	19.80	16.55	17.82	16.95	18.16	18.54
	3H	19.59	20.64	20.00	21.04	21.44	18.47	19.52	18.88	19.92	20.32
	4H	20.22	21.16	20.65	21.58	22.02	19.17	20.11	19.60	20.53	20.96
	6H	20.65	21.47	21.11	21.92	22.38	19.62	20.44	20.08	20.88	21.34
	8H	20.76	21.52	21.22	21.97	22.44	19.72	20.49	20.18	20.93	21.40
	12H	20.81	21.49	21.29	21.97	22.44	19.77	20.46	20.26	20.94	21.41
8H	4H	20.37	21.13	20.83	21.58	22.04	19.41	20.17	19.87	20.62	21.08
	6H	20.87	21.51	21.37	22.00	22.47	19.94	20.58	20.44	21.07	21.54
	8H	21.02	21.59	21.54	22.10	22.59	20.09	20.66	20.61	21.17	21.66
	12H	21.11	21.61	21.62	22.10	22.67	20.19	20.69	20.70	21.18	21.75
12H	4H	20.37	21.05	20.85	21.53	22.00	19.42	20.10	19.90	20.58	21.05
	6H	20.88	21.44	21.39	21.95	22.44	19.97	20.53	20.48	21.04	21.53
	8H	21.06	21.56	21.57	22.05	22.62	20.16	20.66	20.67	21.15	21.71