

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: P1217379

Luminaire Tested: S124DRP-H675D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217379
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-H675D935-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

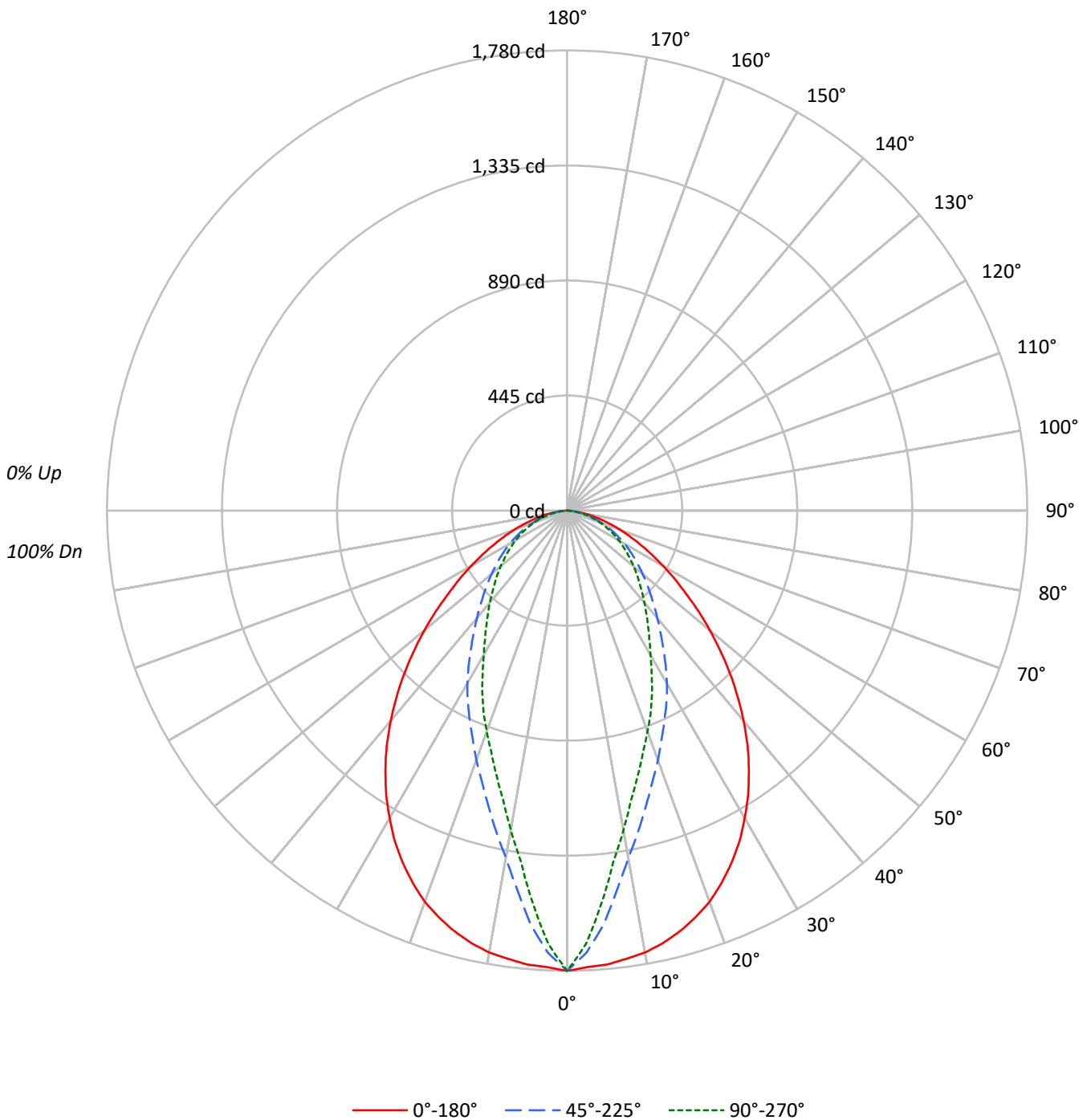
Lumens per Lamp: N/A
Luminaire Lumens: 2496.6 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 23.8
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	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	84	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	58	52	48	57	52	47	45
7	70	58	50	44	68	57	49	44	55	48	43	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	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15739	15739	15739
5°	15646	14276	13531
10°	15581	12238	11260
15°	15419	10798	9686
20°	15149	9662	8555
25°	14667	8695	7578
30°	14020	7882	6578
35°	13224	6989	5889
40°	12250	6260	5365
45°	11134	5694	4950
50°	9920	5241	4626
55°	8651	4869	4325
60°	7597	4532	4076
65°	6575	4182	3805
70°	5695	3790	3505
75°	4738	3348	3078
80°	3671	2714	2515
85°	2303	1826	1674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11134 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	6.0
10°-20°	354.0	14.2
20°-30°	452.3	18.1
30°-40°	459.4	18.4
40°-50°	407.3	16.3
50°-60°	320.0	12.8
60°-70°	217.9	8.7
70°-80°	111.9	4.5
80°-90°	24.8	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°	955.3	38.3
0°-40°	1414.8	56.7
0°-60°	2142.0	85.8
0°-90°	2496.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2496.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1763	1718	1608	1547	1525	167
15°	1684	1406	1180	1082	1058	474
25°	1504	1102	891	806	777	691
35°	1225	835	648	565	546	764
45°	890	601	455	408	396	686
55°	561	401	316	288	281	507
65°	314	243	200	186	182	314
75°	139	114	98	93	90	149
85°	23	21	18	18	16	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1780.2	1780.2	1780.2	1780.2	1780.2
2.5°	1767.6	1770.0	1711.2	1690.0	1677.5
5°	1762.9	1718.2	1608.5	1546.6	1524.6
7.5°	1748.8	1651.6	1478.4	1392.9	1370.2
10°	1735.5	1575.6	1363.1	1278.5	1254.2
12.5°	1713.5	1491.7	1270.6	1173.4	1144.4
15°	1684.5	1406.3	1179.7	1082.5	1058.2
17.5°	1650.0	1324.7	1097.4	1004.1	977.5
20°	1610.1	1249.5	1026.9	931.2	909.3
22.5°	1559.9	1175.0	954.8	868.5	844.2
25°	1503.5	1102.1	891.3	805.8	776.8
27.5°	1443.1	1031.6	832.5	737.6	707.0
30°	1373.3	964.2	772.1	672.6	644.3
32.5°	1302.8	897.5	708.6	614.6	591.8
35°	1225.2	834.8	647.5	565.2	545.6
37.5°	1146.8	774.5	592.6	520.5	503.2
40°	1061.4	715.7	542.4	478.9	464.8
42.5°	975.9	656.9	497.0	442.1	428.8
45°	890.5	601.2	455.4	408.4	395.9
47.5°	804.2	546.4	417.0	375.5	365.3
50°	721.2	494.6	381.0	344.9	336.3
52.5°	640.4	446.0	346.5	315.9	306.5
55°	561.2	400.6	315.9	287.7	280.6
57.5°	493.8	358.2	285.3	261.0	255.5
60°	429.6	317.5	256.3	235.9	230.5
62.5°	369.2	279.8	227.3	210.9	206.9
65°	314.3	243.0	199.9	185.8	181.9
67.5°	264.2	209.3	171.7	161.5	158.3
70°	220.3	175.6	146.6	138.0	135.6
72.5°	176.4	143.4	121.5	115.2	112.9
75°	138.7	114.4	98.0	93.3	90.1
77.5°	104.3	87.0	75.3	71.3	69.0
80°	72.1	61.9	53.3	51.7	49.4
82.5°	45.5	39.2	34.5	33.7	31.4
85°	22.7	21.2	18.0	18.0	16.5
87.5°	7.8	7.1	7.1	7.1	6.3
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	18.48	19.97	18.84	20.28	20.60	15.80	17.29	16.17	17.61	17.92
	3H	20.07	21.41	20.45	21.73	22.10	17.40	18.74	17.78	19.06	19.43
	4H	20.60	21.85	21.00	22.20	22.58	17.96	19.21	18.36	19.56	19.94
	6H	20.93	22.09	21.35	22.46	22.85	18.32	19.47	18.73	19.84	20.23
	8H	21.01	22.11	21.44	22.50	22.90	18.40	19.50	18.83	19.89	20.29
	12H	21.04	22.09	21.47	22.47	22.90	18.44	19.49	18.87	19.87	20.30
4H	2H	18.71	19.96	19.11	20.31	20.69	16.48	17.73	16.88	18.08	18.46
	3H	20.49	21.53	20.90	21.93	22.33	18.27	19.31	18.68	19.71	20.11
	4H	21.13	22.06	21.57	22.48	22.92	18.93	19.86	19.36	20.28	20.72
	6H	21.58	22.39	22.04	22.83	23.29	19.39	20.20	19.85	20.64	21.10
	8H	21.69	22.45	22.15	22.89	23.36	19.51	20.26	19.97	20.71	21.17
	12H	21.75	22.42	22.23	22.90	23.37	19.57	20.24	20.05	20.72	21.19
8H	4H	21.24	21.99	21.70	22.44	22.91	19.23	19.99	19.70	20.43	20.90
	6H	21.75	22.38	22.25	22.87	23.35	19.78	20.40	20.28	20.90	21.37
	8H	21.91	22.47	22.43	22.98	23.47	19.95	20.51	20.46	21.02	21.51
	12H	22.01	22.50	22.52	23.00	23.56	20.06	20.55	20.57	21.04	21.61
12H	4H	21.23	21.90	21.71	22.38	22.85	19.26	19.93	19.74	20.41	20.88
	6H	21.75	22.31	22.26	22.82	23.31	19.82	20.38	20.33	20.89	21.38
	8H	21.94	22.43	22.45	22.93	23.49	20.03	20.52	20.54	21.02	21.58