

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: P1217326

Luminaire Tested: S122DRP-S485D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217326
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-S485D940-X4F0-XX-UDD-G-W
Description: DEFINE 2, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

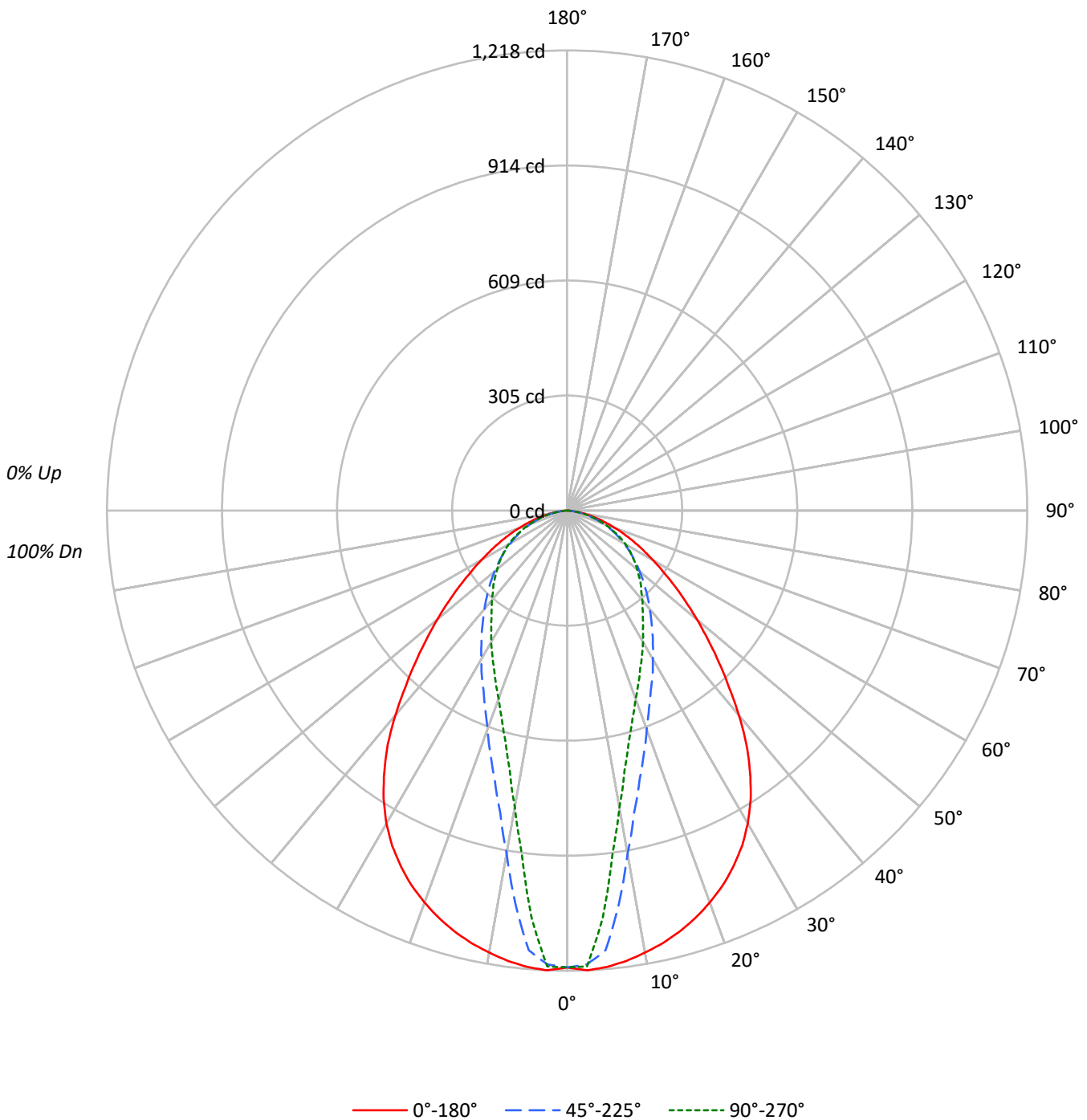
Lumens per Lamp: N/A
Luminaire Lumens: 1625.0 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.5 / 0.8
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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°	22909	22909	22909
5°	23058	22217	20574
10°	22851	17741	15339
15°	22617	14501	12384
20°	22257	12414	10684
25°	21745	10958	9587
30°	20921	9936	8790
35°	19521	9103	8083
40°	17503	8409	7660
45°	15227	7859	7387
50°	13219	7380	7121
55°	11439	6979	6940
60°	9920	6574	6764
65°	8684	6164	6393
70°	7478	5661	5872
75°	6237	4985	5168
80°	4888	4059	3928
85°	3022	2609	2609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15227 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	6.4
10°-20°	229.6	14.1
20°-30°	281.7	17.3
30°-40°	291.1	17.9
40°-50°	262.9	16.2
50°-60°	213.0	13.1
60°-70°	149.4	9.2
70°-80°	77.0	4.7
80°-90°	16.2	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°	615.3	37.9
0°-40°	906.4	55.8
0°-60°	1382.3	85.1
0°-90°	1625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1212	1210	1168	1116	1082	115
15°	1153	972	739	659	631	325
25°	1040	691	524	474	459	478
35°	844	510	394	360	350	525
45°	568	368	293	277	276	440
55°	346	252	211	209	210	312
65°	194	155	138	141	143	194
75°	85	73	68	70	71	92
85°	14	12	12	12	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.2	1209.2	1209.2	1209.2	1209.2
2.5°	1218.1	1213.6	1202.3	1213.0	1207.3
5°	1212.4	1209.9	1168.2	1115.9	1081.8
7.5°	1202.3	1193.5	1049.6	950.6	917.2
10°	1187.8	1143.6	922.2	830.1	797.3
12.5°	1172.6	1068.6	819.4	733.0	703.3
15°	1153.1	972.0	739.3	659.2	631.4
17.5°	1130.4	888.2	675.6	598.6	576.5
20°	1103.9	815.6	615.7	548.2	529.9
22.5°	1074.9	754.4	565.8	510.9	493.9
25°	1040.2	690.7	524.2	474.4	458.6
27.5°	1001.7	642.1	489.5	442.8	429.6
30°	956.3	594.8	454.2	412.5	401.8
32.5°	904.6	550.7	422.6	386.0	373.4
35°	844.0	510.3	393.6	360.2	349.5
37.5°	779.7	470.6	365.9	336.8	328.0
40°	707.7	435.9	340.0	314.1	309.7
42.5°	633.9	401.2	316.7	294.6	290.8
45°	568.3	367.8	293.3	276.9	275.7
47.5°	504.6	337.5	271.9	259.3	258.0
50°	448.5	305.9	250.4	242.2	241.6
52.5°	394.9	278.2	230.2	225.8	227.1
55°	346.3	251.7	211.3	208.8	210.1
57.5°	301.5	227.1	192.4	193.0	194.9
60°	261.8	201.9	173.5	176.0	178.5
62.5°	227.1	178.5	155.2	159.0	161.5
65°	193.7	155.2	137.5	140.7	142.6
67.5°	164.0	133.1	119.9	123.6	124.3
70°	135.0	112.9	102.2	106.0	106.0
72.5°	109.8	92.1	85.2	87.0	87.7
75°	85.2	73.2	68.1	70.0	70.6
77.5°	64.3	55.5	51.7	53.6	53.0
80°	44.8	39.1	37.2	36.6	36.0
82.5°	27.8	24.6	22.7	23.3	22.7
85°	13.9	12.0	12.0	12.0	12.0
87.5°	4.4	4.4	4.4	4.4	4.4
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	19.38	20.88	19.74	21.19	21.51	17.88	19.37	18.24	19.69	20.00
	3H	20.96	22.31	21.34	22.64	23.00	19.59	20.93	19.97	21.26	21.62
	4H	21.49	22.75	21.89	23.10	23.48	20.17	21.43	20.57	21.78	22.16
	6H	21.82	22.98	22.23	23.35	23.74	20.52	21.68	20.93	22.05	22.44
	8H	21.89	23.00	22.32	23.39	23.79	20.59	21.70	21.02	22.09	22.49
	12H	21.92	22.98	22.35	23.36	23.79	20.62	21.68	21.05	22.07	22.50
4H	2H	19.69	20.95	20.09	21.30	21.68	18.44	19.70	18.84	20.05	20.43
	3H	21.47	22.52	21.88	22.92	23.32	20.35	21.40	20.76	21.80	22.20
	4H	22.10	23.04	22.53	23.46	23.90	21.05	21.99	21.48	22.41	22.85
	6H	22.53	23.35	22.99	23.79	24.26	21.50	22.32	21.96	22.76	23.22
	8H	22.64	23.40	23.10	23.85	24.32	21.60	22.37	22.07	22.81	23.28
	12H	22.69	23.37	23.17	23.85	24.32	21.66	22.34	22.14	22.82	23.29
8H	4H	22.25	23.01	22.71	23.46	23.93	21.29	22.05	21.75	22.50	22.97
	6H	22.75	23.38	23.25	23.88	24.35	21.83	22.46	22.32	22.95	23.43
	8H	22.90	23.47	23.42	23.98	24.46	21.98	22.54	22.49	23.05	23.54
	12H	22.99	23.49	23.50	23.98	24.55	22.07	22.57	22.58	23.06	23.63
12H	4H	22.25	22.93	22.73	23.41	23.88	21.30	21.98	21.78	22.46	22.93
	6H	22.76	23.32	23.27	23.83	24.32	21.85	22.41	22.36	22.92	23.41
	8H	22.94	23.44	23.45	23.93	24.50	22.04	22.54	22.55	23.03	23.59