

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997626

Luminaire Tested: SA2XXDP-B675DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997626
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B675DB27-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

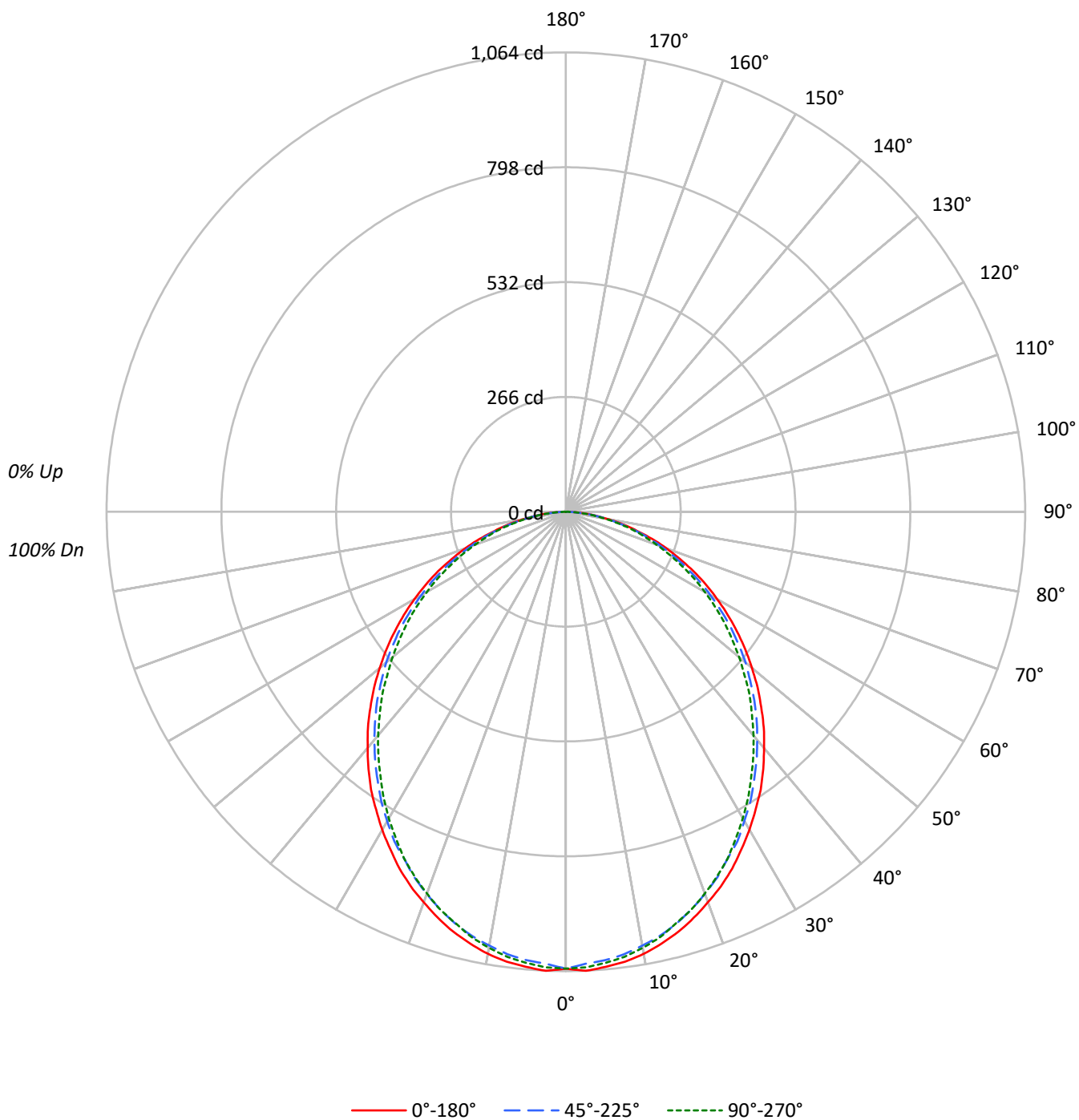
Lumens per Lamp: N/A
Luminaire Lumens: 2692.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16749	16749	16749
5°	16813	16570	16668
10°	16713	16403	16485
15°	16506	16189	16173
20°	16213	15870	15853
25°	15922	15478	15478
30°	15547	15120	14988
35°	15198	14686	14470
40°	14758	14254	13981
45°	14327	13826	13483
50°	13855	13379	12904
55°	13365	12860	12383
60°	12819	12239	11790
65°	12233	11622	11091
70°	11487	10876	10358
75°	10452	10018	9767
80°	9271	8997	8532
85°	7574	7210	6466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14327 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	3.7
10°-20°	280.2	10.4
20°-30°	411.8	15.3
30°-40°	478.3	17.8
40°-50°	477.7	17.7
50°-60°	416.5	15.5
60°-70°	307.9	11.4
70°-80°	174.2	6.5
80°-90°	46.0	1.7
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°	791.6	29.4
0°-40°	1269.8	47.2
0°-60°	2164.0	80.4
0°-90°	2692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1058	1054	1043	1051	1049	100
15°	1007	1001	988	992	987	284
25°	912	904	886	888	886	419
35°	786	776	760	754	749	491
45°	640	633	618	606	602	494
55°	484	478	466	454	449	433
65°	327	320	310	301	296	323
75°	171	169	164	158	160	182
85°	42	41	40	37	36	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.1	1058.1	1058.1	1058.1	1058.1
2.5°	1064.2	1059.1	1047.9	1058.1	1056.1
5°	1058.1	1054.0	1042.8	1051.0	1049.0
7.5°	1051.0	1044.9	1033.7	1041.8	1039.8
10°	1039.8	1032.7	1020.5	1028.6	1025.6
12.5°	1024.5	1018.4	1006.2	1011.3	1009.3
15°	1007.2	1001.1	987.9	992.0	986.9
17.5°	985.9	979.8	966.5	971.6	966.5
20°	962.5	956.4	942.1	945.2	941.1
22.5°	939.1	929.9	916.7	916.7	914.7
25°	911.6	903.5	886.2	888.2	886.2
27.5°	881.1	874.0	860.7	857.7	852.6
30°	850.6	842.4	827.2	824.1	820.0
32.5°	818.0	811.9	795.6	789.5	785.4
35°	786.5	776.3	760.0	753.9	748.8
37.5°	750.9	741.7	725.4	718.3	713.2
40°	714.2	706.1	689.8	680.6	676.6
42.5°	678.6	670.5	654.2	644.0	637.9
45°	640.0	632.8	617.6	606.4	602.3
47.5°	602.3	595.2	578.9	567.7	561.6
50°	562.6	557.5	543.3	529.1	524.0
52.5°	524.0	516.8	503.6	492.4	485.3
55°	484.3	478.2	466.0	453.8	448.7
57.5°	444.6	439.5	426.3	414.1	410.0
60°	404.9	400.9	386.6	375.4	372.4
62.5°	366.3	359.1	349.0	338.8	334.7
65°	326.6	320.5	310.3	301.2	296.1
67.5°	285.9	280.8	271.6	264.5	260.5
70°	248.2	244.2	235.0	227.9	223.8
72.5°	209.6	205.5	200.4	193.3	190.3
75°	170.9	168.9	163.8	157.7	159.7
77.5°	136.3	132.3	130.2	127.2	124.1
80°	101.7	100.7	98.7	95.6	93.6
82.5°	69.2	69.2	68.2	64.1	64.1
85°	41.7	40.7	39.7	36.6	35.6
87.5°	18.3	16.3	14.2	11.2	10.2
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	21.07	22.68	21.44	23.00	23.31	20.63	22.24	21.00	22.56	22.87
	3H	22.82	24.28	23.20	24.61	24.97	22.33	23.79	22.71	24.11	24.47
	4H	23.47	24.84	23.87	25.19	25.56	22.98	24.34	23.37	24.69	25.07
	6H	23.94	25.21	24.35	25.57	25.96	23.44	24.71	23.85	25.07	25.46
	8H	24.08	25.29	24.51	25.68	26.08	23.58	24.79	24.00	25.18	25.58
	12H	24.17	25.33	24.60	25.71	26.14	23.66	24.82	24.09	25.20	25.63
4H	2H	21.63	23.00	22.03	23.35	23.73	21.28	22.65	21.68	23.00	23.38
	3H	23.61	24.76	24.02	25.15	25.55	23.20	24.35	23.61	24.75	25.15
	4H	24.39	25.42	24.82	25.84	26.27	23.96	25.00	24.39	25.41	25.85
	6H	24.98	25.89	25.44	26.33	26.78	24.55	25.46	25.00	25.90	26.35
	8H	25.17	26.02	25.63	26.46	26.93	24.73	25.58	25.19	26.02	26.49
	12H	25.30	26.06	25.78	26.54	27.01	24.85	25.61	25.33	26.09	26.56
8H	4H	24.66	25.51	25.12	25.95	26.41	24.29	25.13	24.75	25.57	26.04
	6H	25.37	26.08	25.87	26.57	27.04	24.99	25.70	25.49	26.18	26.66
	8H	25.63	26.26	26.14	26.77	27.26	25.24	25.87	25.75	26.38	26.86
	12H	25.83	26.39	26.34	26.88	27.44	25.42	25.98	25.93	26.47	27.03
12H	4H	24.69	25.45	25.17	25.92	26.39	24.32	25.08	24.80	25.56	26.03
	6H	25.42	26.05	25.93	26.56	27.04	25.05	25.68	25.56	26.19	26.68
	8H	25.73	26.29	26.24	26.78	27.34	25.36	25.91	25.86	26.40	26.96