

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: P997639

Luminaire Tested: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997639
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-B675DB2750-4F0-XX-W2A-F_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

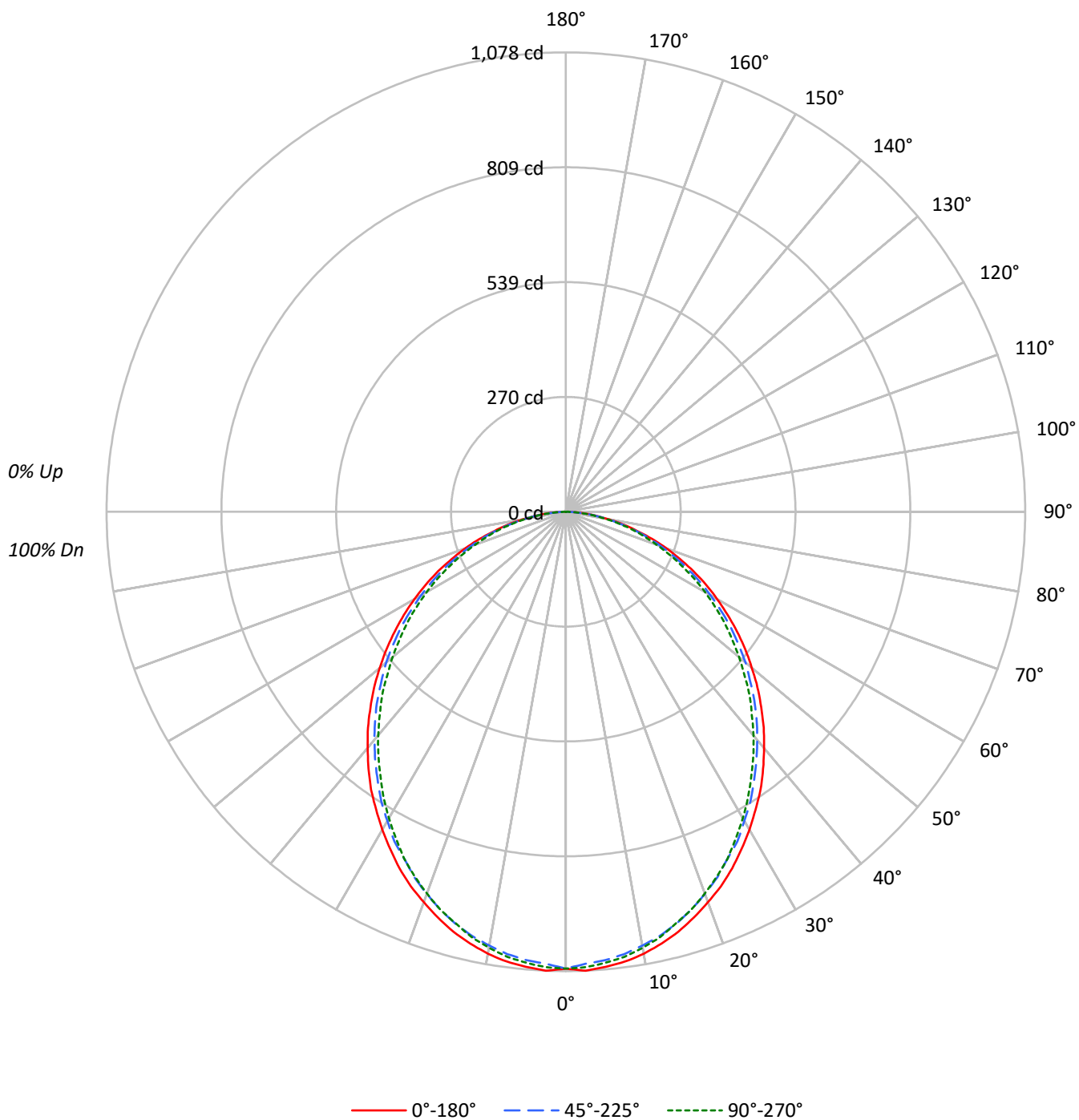
Lumens per Lamp: N/A
Luminaire Lumens: 2727.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	16967	16967	16967
5°	17032	16786	16884
10°	16930	16615	16699
15°	16720	16401	16383
20°	16424	16077	16059
25°	16130	15679	15679
30°	15748	15315	15184
35°	15395	14878	14659
40°	14950	14440	14163
45°	14513	14005	13658
50°	14034	13554	13071
55°	13539	13026	12543
60°	12986	12397	11942
65°	12390	11772	11233
70°	11640	11020	10492
75°	10587	10146	9896
80°	9398	9116	8642
85°	7683	7301	6557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14513 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	3.7
10°-20°	283.8	10.4
20°-30°	417.1	15.3
30°-40°	484.5	17.8
40°-50°	483.9	17.7
50°-60°	421.9	15.5
60°-70°	311.9	11.4
70°-80°	176.5	6.5
80°-90°	46.6	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°	801.8	29.4
0°-40°	1286.3	47.2
0°-60°	2192.1	80.4
0°-90°	2727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2727.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1072	1068	1056	1065	1063	102
15°	1020	1014	1001	1005	1000	287
25°	924	915	898	900	898	425
35°	797	786	770	764	759	497
45°	648	641	626	614	610	500
55°	491	484	472	460	454	439
65°	331	325	314	305	300	327
75°	173	171	166	160	162	185
85°	42	41	40	37	36	50
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.9	1071.9	1071.9	1071.9	1071.9
2.5°	1078.1	1072.9	1061.6	1071.9	1069.8
5°	1071.9	1067.7	1056.4	1064.7	1062.6
7.5°	1064.7	1058.5	1047.1	1055.4	1053.3
10°	1053.3	1046.1	1033.7	1042.0	1038.9
12.5°	1037.9	1031.7	1019.3	1024.5	1022.4
15°	1020.3	1014.2	1000.8	1004.9	999.7
17.5°	998.7	992.5	979.1	984.3	979.1
20°	975.0	968.8	954.4	957.5	953.3
22.5°	951.3	942.0	928.6	928.6	926.5
25°	923.5	915.2	897.7	899.7	897.7
27.5°	892.5	885.3	871.9	868.8	863.7
30°	861.6	853.4	837.9	834.8	830.7
32.5°	828.6	822.5	806.0	799.8	795.7
35°	796.7	786.4	769.9	763.7	758.6
37.5°	760.6	751.3	734.8	727.6	722.5
40°	723.5	715.3	698.8	689.5	685.4
42.5°	687.4	679.2	662.7	652.4	646.2
45°	648.3	641.1	625.6	614.3	610.1
47.5°	610.1	602.9	586.4	575.1	568.9
50°	569.9	564.8	550.4	535.9	530.8
52.5°	530.8	523.6	510.2	498.8	491.6
55°	490.6	484.4	472.0	459.7	454.5
57.5°	450.4	445.2	431.8	419.5	415.3
60°	410.2	406.1	391.6	380.3	377.2
62.5°	371.0	363.8	353.5	343.2	339.1
65°	330.8	324.7	314.3	305.1	299.9
67.5°	289.6	284.5	275.2	268.0	263.8
70°	251.5	247.4	238.1	230.9	226.7
72.5°	212.3	208.2	203.0	195.8	192.7
75°	173.1	171.1	165.9	159.7	161.8
77.5°	138.1	134.0	131.9	128.8	125.7
80°	103.1	102.0	100.0	96.9	94.8
82.5°	70.1	70.1	69.1	64.9	64.9
85°	42.3	41.2	40.2	37.1	36.1
87.5°	18.6	16.5	14.4	11.3	10.3
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	21.12	22.73	21.48	23.04	23.36	20.68	22.29	21.04	22.60	22.91
	3H	22.87	24.32	23.25	24.65	25.01	22.38	23.83	22.76	24.16	24.52
	4H	23.52	24.88	23.91	25.23	25.61	23.02	24.39	23.42	24.74	25.11
	6H	23.98	25.25	24.40	25.62	26.01	23.48	24.75	23.89	25.12	25.51
	8H	24.13	25.34	24.55	25.73	26.13	23.62	24.84	24.05	25.22	25.62
	12H	24.22	25.38	24.65	25.76	26.19	23.71	24.87	24.13	25.25	25.68
4H	2H	21.68	23.05	22.08	23.40	23.77	21.33	22.70	21.73	23.04	23.42
	3H	23.65	24.80	24.06	25.20	25.60	23.25	24.39	23.66	24.79	25.19
	4H	24.43	25.47	24.86	25.88	26.32	24.01	25.04	24.44	25.46	25.89
	6H	25.03	25.93	25.48	26.37	26.83	24.59	25.50	25.05	25.94	26.40
	8H	25.22	26.06	25.68	26.51	26.97	24.78	25.63	25.24	26.07	26.53
	12H	25.35	26.11	25.83	26.59	27.05	24.90	25.66	25.38	26.13	26.60
8H	4H	24.70	25.55	25.17	25.99	26.46	24.33	25.18	24.79	25.62	26.08
	6H	25.42	26.12	25.91	26.61	27.09	25.04	25.74	25.53	26.23	26.70
	8H	25.68	26.31	26.19	26.82	27.30	25.29	25.92	25.80	26.42	26.91
	12H	25.88	26.44	26.39	26.93	27.49	25.46	26.02	25.97	26.51	27.07
12H	4H	24.73	25.49	25.21	25.97	26.44	24.37	25.13	24.85	25.60	26.07
	6H	25.46	26.10	25.97	26.60	27.09	25.10	25.73	25.61	26.23	26.72
	8H	25.78	26.34	26.29	26.83	27.39	25.40	25.96	25.91	26.45	27.01