

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: P997638

Luminaire Tested: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997638
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_3000K
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

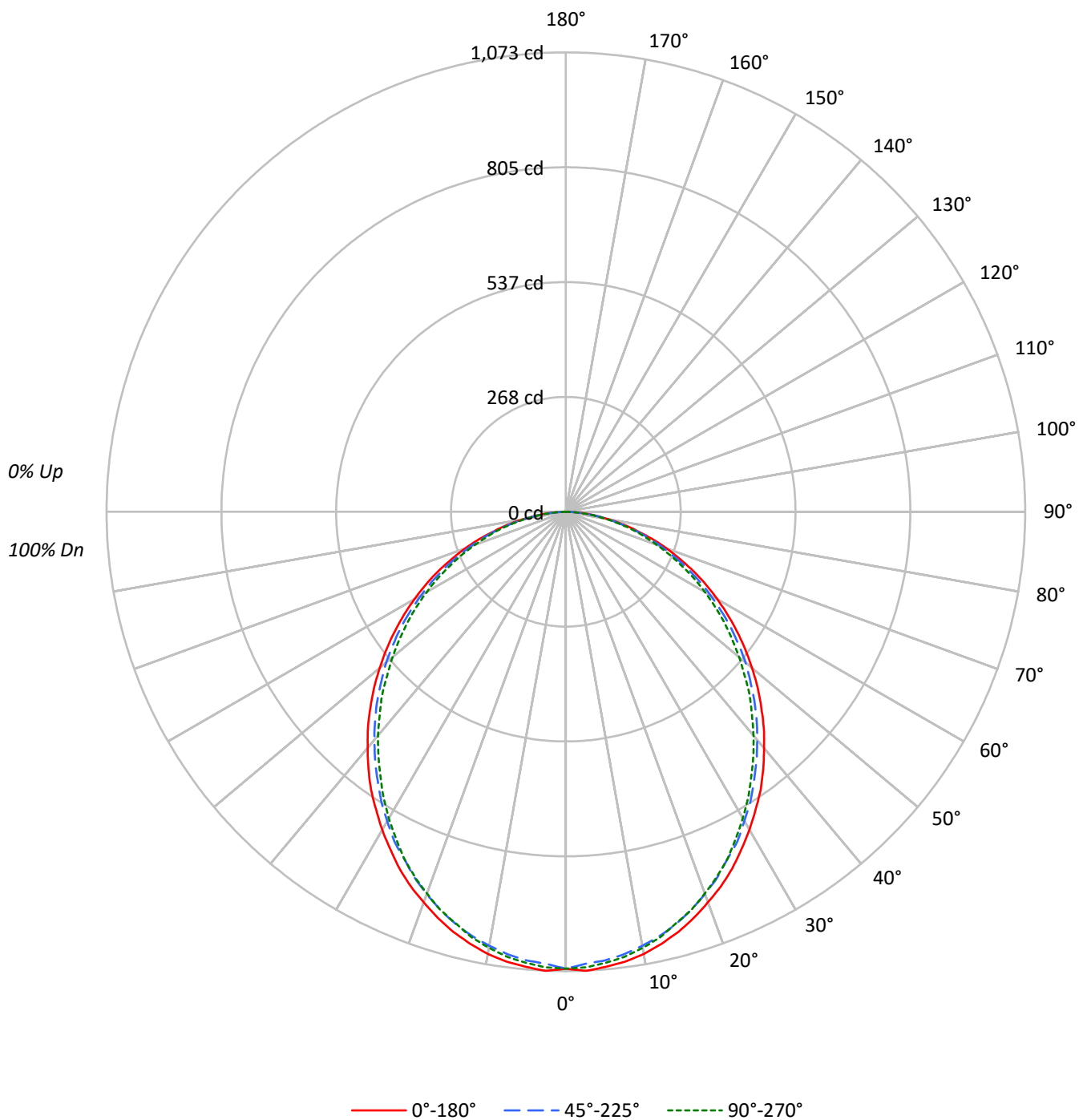
Lumens per Lamp: N/A
Luminaire Lumens: 2715.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P997638

CATALOG NUMBER: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P997638

CATALOG NUMBER: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

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°	16891	16891	16891
5°	16956	16713	16810
10°	16856	16543	16625
15°	16647	16327	16311
20°	16352	16006	15988
25°	16058	15609	15609
30°	15679	15248	15116
35°	15328	14812	14593
40°	14884	14376	14101
45°	14448	13942	13599
50°	13973	13493	13012
55°	13479	12971	12488
60°	12929	12344	11891
65°	12338	11724	11184
70°	11589	10969	10446
75°	10544	10104	9853
80°	9353	9070	8605
85°	7646	7265	6520

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14448 cd/sqm

TEST NUMBER: P997638

CATALOG NUMBER: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.7
10°-20°	282.6	10.4
20°-30°	415.3	15.3
30°-40°	482.3	17.8
40°-50°	481.7	17.7
50°-60°	420.0	15.5
60°-70°	310.5	11.4
70°-80°	175.7	6.5
80°-90°	46.4	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°	798.3	29.4
0°-40°	1280.6	47.2
0°-60°	2182.4	80.4
0°-90°	2715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2715.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1067	1063	1052	1060	1058	101
15°	1016	1010	996	1000	995	286
25°	919	911	894	896	894	423
35°	793	783	766	760	755	495
45°	645	638	623	612	608	498
55°	488	482	470	458	452	437
65°	329	323	313	304	299	326
75°	172	170	165	159	161	184
85°	42	41	40	37	36	49
90°	0	0	0	0	0	

TEST NUMBER: P997638

CATALOG NUMBER: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.1	1067.1	1067.1	1067.1	1067.1
2.5°	1073.3	1068.2	1056.9	1067.1	1065.1
5°	1067.1	1063.0	1051.8	1060.0	1057.9
7.5°	1060.0	1053.8	1042.5	1050.7	1048.7
10°	1048.7	1041.5	1029.2	1037.4	1034.3
12.5°	1033.3	1027.1	1014.8	1019.9	1017.9
15°	1015.8	1009.7	996.3	1000.5	995.3
17.5°	994.3	988.1	974.8	979.9	974.8
20°	970.7	964.5	950.2	953.3	949.1
22.5°	947.1	937.9	924.5	924.5	922.5
25°	919.4	911.2	893.7	895.8	893.7
27.5°	888.6	881.4	868.1	865.0	859.9
30°	857.8	849.6	834.2	831.1	827.0
32.5°	825.0	818.8	802.4	796.3	792.2
35°	793.2	782.9	766.5	760.3	755.2
37.5°	757.3	748.0	731.6	724.4	719.3
40°	720.3	712.1	695.7	686.5	682.4
42.5°	684.4	676.2	659.8	649.5	643.4
45°	645.4	638.2	622.8	611.6	607.5
47.5°	607.5	600.3	583.9	572.6	566.4
50°	567.4	562.3	547.9	533.6	528.4
52.5°	528.4	521.3	507.9	496.6	489.5
55°	488.4	482.3	470.0	457.6	452.5
57.5°	448.4	443.3	429.9	417.6	413.5
60°	408.4	404.3	389.9	378.6	375.6
62.5°	369.4	362.2	352.0	341.7	337.6
65°	329.4	323.2	313.0	303.7	298.6
67.5°	288.3	283.2	274.0	266.8	262.7
70°	250.4	246.3	237.0	229.8	225.7
72.5°	211.4	207.3	202.1	195.0	191.9
75°	172.4	170.3	165.2	159.0	161.1
77.5°	137.5	133.4	131.3	128.3	125.2
80°	102.6	101.6	99.5	96.5	94.4
82.5°	69.8	69.8	68.7	64.6	64.6
85°	42.1	41.0	40.0	36.9	35.9
87.5°	18.5	16.4	14.4	11.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997638

CATALOG NUMBER: SA2XXDP-B675DB2750-4F0-XX-W2A-F_3000K

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	21.10	22.71	21.47	23.03	23.34	20.66	22.27	21.02	22.58	22.90
	3H	22.85	24.31	23.23	24.64	25.00	22.36	23.82	22.74	24.14	24.50
	4H	23.50	24.87	23.90	25.22	25.59	23.00	24.37	23.40	24.72	25.10
	6H	23.97	25.24	24.38	25.60	25.99	23.47	24.74	23.88	25.10	25.49
	8H	24.11	25.32	24.54	25.71	26.11	23.61	24.82	24.03	25.21	25.61
	12H	24.20	25.36	24.63	25.74	26.17	23.69	24.85	24.12	25.23	25.66
4H	2H	21.66	23.03	22.06	23.38	23.76	21.31	22.68	21.71	23.03	23.40
	3H	23.64	24.79	24.05	25.18	25.58	23.23	24.38	23.64	24.78	25.18
	4H	24.42	25.45	24.85	25.87	26.30	23.99	25.03	24.42	25.44	25.88
	6H	25.01	25.92	25.47	26.36	26.81	24.58	25.48	25.03	25.93	26.38
	8H	25.20	26.05	25.66	26.49	26.96	24.76	25.61	25.22	26.05	26.52
	12H	25.33	26.09	25.81	26.57	27.04	24.88	25.64	25.36	26.12	26.59
8H	4H	24.69	25.54	25.15	25.98	26.44	24.31	25.16	24.78	25.60	26.07
	6H	25.40	26.11	25.90	26.60	27.07	25.02	25.73	25.52	26.21	26.69
	8H	25.66	26.29	26.17	26.80	27.29	25.27	25.90	25.78	26.41	26.89
	12H	25.86	26.42	26.37	26.91	27.47	25.45	26.01	25.96	26.50	27.06
12H	4H	24.72	25.48	25.20	25.95	26.42	24.35	25.11	24.83	25.59	26.06
	6H	25.45	26.08	25.96	26.59	27.07	25.08	25.71	25.59	26.22	26.71
	8H	25.76	26.32	26.27	26.81	27.37	25.38	25.94	25.89	26.43	26.99