

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: P997650

Luminaire Tested: SA2XXDP-B675DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997650
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-B675DB40-4F0-XX-W2A-F
Description: Define 2 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

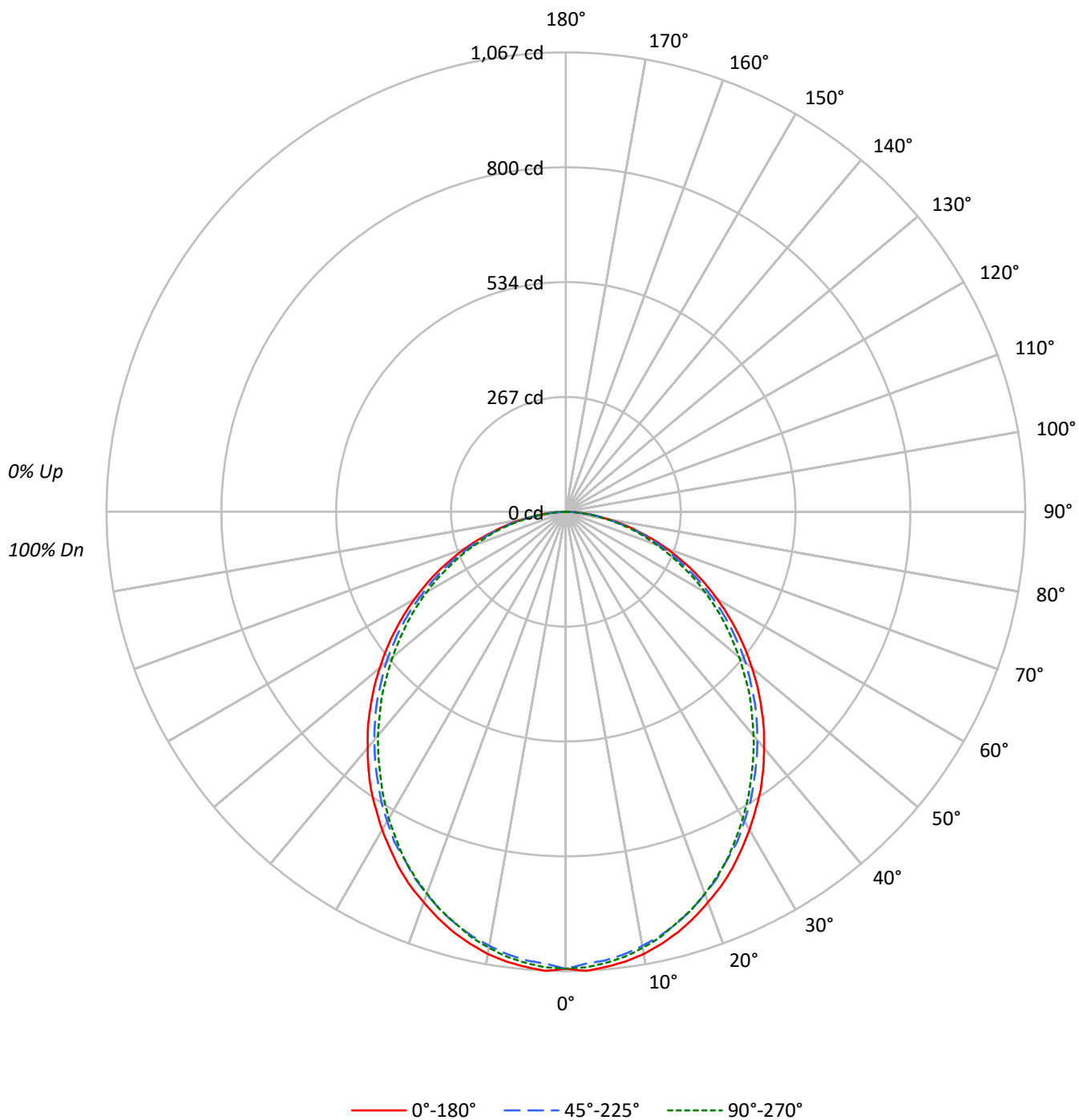
Lumens per Lamp: N/A
Luminaire Lumens: 2700.0 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P997650

CATALOG NUMBER: SA2XXDP-B675DB40-4F0-XX-W2A-F

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°	16800	16800	16800
5°	16864	16619	16718
10°	16763	16451	16533
15°	16555	16237	16221
20°	16261	15917	15900
25°	15969	15524	15524
30°	15593	15164	15034
35°	15243	14731	14512
40°	14801	14297	14022
45°	14370	13866	13523
50°	13896	13419	12941
55°	13404	12899	12419
60°	12857	12277	11824
65°	12270	11656	11120
70°	11524	10909	10390
75°	10483	10049	9798
80°	9298	9025	8560
85°	7592	7229	6484

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14370 cd/sqm

TEST NUMBER: P997650

CATALOG NUMBER: SA2XXDP-B675DB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	3.7
10°-20°	281.0	10.4
20°-30°	413.0	15.3
30°-40°	479.7	17.8
40°-50°	479.1	17.7
50°-60°	417.7	15.5
60°-70°	308.8	11.4
70°-80°	174.7	6.5
80°-90°	46.1	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°	793.9	29.4
0°-40°	1273.6	47.2
0°-60°	2170.4	80.4
0°-90°	2700.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2700.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1061	1057	1046	1054	1052	101
15°	1010	1004	991	995	990	285
25°	914	906	889	891	889	421
35°	789	779	762	756	751	493
45°	642	635	619	608	604	495
55°	486	480	467	455	450	434
65°	328	321	311	302	297	324
75°	171	169	164	158	160	183
85°	42	41	40	37	36	49
90°	0	0	0	0	0	

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CATALOG NUMBER: SA2XXDP-B675DB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.3	1061.3	1061.3	1061.3	1061.3
2.5°	1067.4	1062.3	1051.0	1061.3	1059.2
5°	1061.3	1057.2	1045.9	1054.1	1052.1
7.5°	1054.1	1048.0	1036.8	1044.9	1042.9
10°	1042.9	1035.7	1023.5	1031.7	1028.6
12.5°	1027.6	1021.5	1009.2	1014.3	1012.3
15°	1010.2	1004.1	990.8	994.9	989.8
17.5°	988.8	982.7	969.4	974.5	969.4
20°	965.3	959.2	944.9	948.0	943.9
22.5°	941.9	932.7	919.4	919.4	917.4
25°	914.3	906.1	888.8	890.8	888.8
27.5°	883.7	876.6	863.3	860.2	855.1
30°	853.1	844.9	829.6	826.6	822.5
32.5°	820.4	814.3	798.0	791.9	787.8
35°	788.8	778.6	762.3	756.1	751.0
37.5°	753.1	743.9	727.6	720.4	715.3
40°	716.3	708.2	691.9	682.7	678.6
42.5°	680.6	672.5	656.1	645.9	639.8
45°	641.9	634.7	619.4	608.2	604.1
47.5°	604.1	597.0	580.6	569.4	563.3
50°	564.3	559.2	544.9	530.6	525.5
52.5°	525.5	518.4	505.1	493.9	486.7
55°	485.7	479.6	467.4	455.1	450.0
57.5°	445.9	440.8	427.6	415.3	411.2
60°	406.1	402.1	387.8	376.5	373.5
62.5°	367.4	360.2	350.0	339.8	335.7
65°	327.6	321.4	311.2	302.0	296.9
67.5°	286.7	281.6	272.5	265.3	261.2
70°	249.0	244.9	235.7	228.6	224.5
72.5°	210.2	206.1	201.0	193.9	190.8
75°	171.4	169.4	164.3	158.2	160.2
77.5°	136.7	132.7	130.6	127.6	124.5
80°	102.0	101.0	99.0	95.9	93.9
82.5°	69.4	69.4	68.4	64.3	64.3
85°	41.8	40.8	39.8	36.7	35.7
87.5°	18.4	16.3	14.3	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	21.08	22.69	21.45	23.01	23.32	20.64	22.25	21.01	22.57	22.88
	3H	22.83	24.29	23.21	24.62	24.98	22.34	23.80	22.72	24.12	24.48
	4H	23.48	24.85	23.88	25.20	25.57	22.99	24.35	23.38	24.70	25.08
	6H	23.95	25.22	24.36	25.58	25.97	23.45	24.72	23.86	25.08	25.47
	8H	24.09	25.30	24.52	25.69	26.09	23.59	24.80	24.01	25.19	25.59
	12H	24.18	25.34	24.61	25.72	26.15	23.67	24.83	24.10	25.21	25.64
4H	2H	21.64	23.01	22.04	23.36	23.74	21.29	22.66	21.69	23.01	23.38
	3H	23.62	24.77	24.03	25.16	25.56	23.21	24.36	23.62	24.76	25.16
	4H	24.40	25.43	24.83	25.85	26.28	23.97	25.01	24.40	25.42	25.86
	6H	24.99	25.90	25.45	26.34	26.79	24.56	25.47	25.02	25.91	26.36
	8H	25.18	26.03	25.64	26.47	26.94	24.74	25.59	25.21	26.03	26.50
	12H	25.31	26.07	25.79	26.55	27.02	24.86	25.62	25.34	26.10	26.57
8H	4H	24.67	25.52	25.13	25.96	26.42	24.30	25.14	24.76	25.58	26.05
	6H	25.38	26.09	25.88	26.58	27.05	25.00	25.71	25.50	26.19	26.67
	8H	25.64	26.27	26.15	26.78	27.27	25.25	25.88	25.76	26.39	26.88
	12H	25.84	26.40	26.35	26.89	27.45	25.43	25.99	25.94	26.48	27.04
12H	4H	24.70	25.46	25.18	25.93	26.40	24.33	25.09	24.81	25.57	26.04
	6H	25.43	26.06	25.94	26.57	27.05	25.06	25.69	25.57	26.20	26.69
	8H	25.74	26.30	26.25	26.79	27.35	25.37	25.92	25.87	26.41	26.98