

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: P1000733

Luminaire Tested: SA4XXDIP-B1020D590UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000733
REPORT IS A COMBINATION OF REPORTS P995346 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D590UB40-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

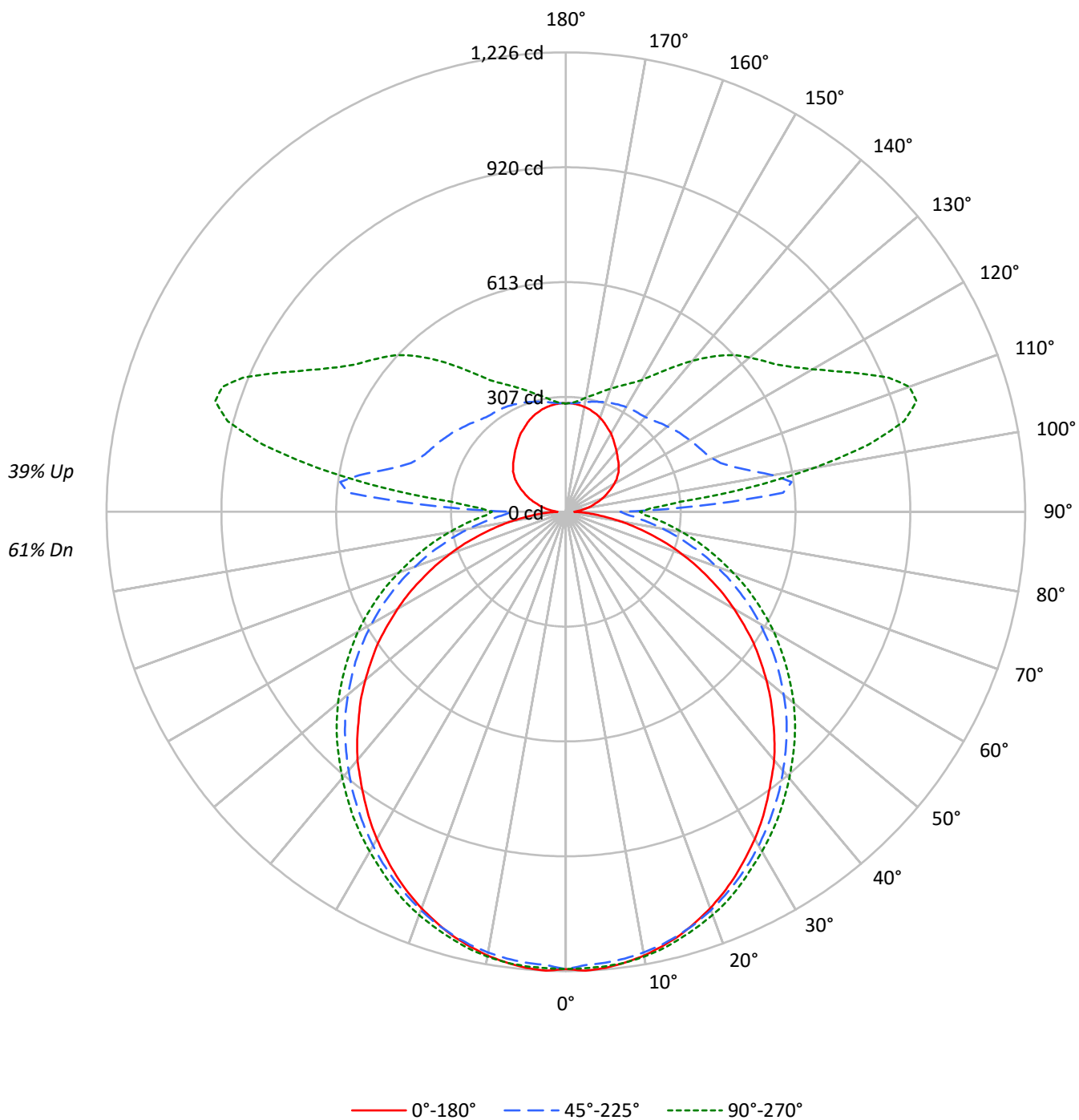
Lumens per Lamp: N/A
Luminaire Lumens: 6273.2 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	92	88	84	81	77	74	71	66	64	62	57	55	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	49	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	43	40	37
4	74	63	54	48	69	59	51	45	52	45	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	34	31	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	42	35	29	37	31	27	33	28	24	28	24	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	32	25	21	29	23	19	25	21	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9952	9952	9952
5°	9979	9692	9710
10°	9915	9502	9475
15°	9822	9287	9209
20°	9684	9055	8951
25°	9530	8800	8673
30°	9362	8546	8390
35°	9172	8286	8137
40°	9020	8037	7876
45°	8795	7804	7644
50°	8604	7539	7400
55°	8405	7283	7120
60°	8097	6965	6856
65°	7759	6622	6538
70°	7349	6230	6169
75°	6775	5792	5820
80°	6128	5350	5453
85°	5268	4902	5156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8795 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	1.8
10°-20°	331.3	5.3
20°-30°	501.0	8.0
30°-40°	606.1	9.7
40°-50°	640.7	10.2
50°-60°	603.0	9.6
60°-70°	500.4	8.0
70°-80°	351.1	5.6
80°-90°	199.1	3.2
90°-100°	332.7	5.3
100°-110°	524.3	8.4
110°-120°	448.1	7.1
120°-130°	360.2	5.7
130°-140°	287.3	4.6
140°-150°	211.4	3.4
150°-160°	146.6	2.3
160°-170°	86.2	1.4
170°-180°	28.0	0.4
0°-30°	947.9	15.1
0°-40°	1554.0	24.8
0°-60°	2797.7	44.6
0°-90°	3848.3	61.3
90°-120°	1305.2	20.8
90°-150°	2164.0	34.5
90°-180°	2425.0	38.7
0°-180°	6273.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1222	1218	1208	1219	1218	116
15°	1171	1173	1168	1181	1179	330
25°	1072	1080	1084	1099	1100	494
35°	938	954	968	987	991	587
45°	782	808	834	857	864	604
55°	612	641	682	709	718	546
65°	424	467	514	548	559	420
75°	235	286	343	381	394	250
85°	72	130	191	232	246	75
90°	22	81	146	186	198	16
95°	37	122	582	385	307	35
105°	79	136	463	927	935	85
115°	125	167	397	733	872	125
125°	169	198	369	608	685	151
135°	196	233	340	517	590	152
145°	225	256	326	415	461	141
155°	254	274	317	359	374	117
165°	277	285	304	322	327	78
175°	289	289	292	296	294	27
180°	289	289	289	289	289	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1225.9	1221.8	1210.9	1220.4	1219.1
5°	1221.8	1217.7	1208.1	1219.1	1217.7
7.5°	1213.6	1210.9	1202.7	1215.0	1213.6
10°	1202.7	1201.3	1194.5	1206.8	1205.4
12.5°	1187.6	1187.6	1183.5	1194.5	1194.5
15°	1171.2	1172.6	1168.5	1180.8	1179.4
17.5°	1149.4	1153.5	1152.1	1164.4	1163.0
20°	1126.1	1130.2	1131.6	1145.3	1145.3
22.5°	1100.2	1105.6	1108.4	1122.0	1124.8
25°	1071.5	1079.7	1083.8	1098.8	1100.2
27.5°	1040.0	1052.3	1057.8	1071.5	1072.8
30°	1008.6	1019.5	1029.1	1044.1	1046.9
32.5°	974.4	988.1	999.0	1016.8	1019.5
35°	937.5	953.9	967.6	986.7	990.8
37.5°	900.6	919.8	936.2	955.3	959.4
40°	865.1	882.9	902.0	922.5	928.0
42.5°	824.1	844.6	867.8	891.1	895.2
45°	781.7	807.7	833.7	856.9	863.7
47.5°	742.1	768.1	798.1	821.4	829.6
50°	698.4	728.4	758.5	785.8	794.0
52.5°	654.6	684.7	720.2	747.6	755.8
55°	612.3	641.0	682.0	709.3	717.5
57.5°	564.4	600.0	639.6	672.4	679.2
60°	518.0	553.5	598.6	630.0	641.0
62.5°	472.9	512.5	557.6	589.0	600.0
65°	423.7	467.4	513.9	548.0	559.0
67.5°	377.2	423.7	472.9	507.0	518.0
70°	329.4	375.8	427.8	464.7	474.2
72.5°	282.9	330.7	386.8	422.3	433.2
75°	235.1	285.6	343.0	381.3	393.6
77.5°	190.0	243.3	303.4	341.7	355.3
80°	149.0	203.6	263.8	304.8	315.7
82.5°	108.0	165.4	225.5	267.9	280.2
85°	72.4	129.8	191.3	232.3	246.0
87.5°	45.1	101.1	161.3	200.9	213.2
90°	22.5	81.0	145.5	186.3	197.8
92.5°	28.5	112.0	349.9	239.0	228.0
95°	36.6	122.0	582.1	385.2	306.8
97.5°	47.7	121.4	607.7	615.9	492.9
100°	58.2	124.5	560.8	788.7	671.4
102.5°	69.6	129.2	505.6	893.0	828.3
105°	78.8	136.0	463.0	927.2	934.9
107.5°	91.9	144.4	432.9	907.4	981.3
110°	103.5	151.4	416.6	853.8	975.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.7	159.8	404.7	789.9	933.9
115°	125.3	167.4	396.7	733.1	871.7
117.5°	137.8	175.5	389.3	685.6	811.9
120°	148.9	182.0	382.5	651.0	760.6
122.5°	160.2	189.5	375.0	626.9	718.3
125°	168.6	197.9	369.1	607.8	685.0
127.5°	177.7	208.2	361.0	588.0	662.3
130°	183.7	216.6	353.7	567.2	640.5
132.5°	191.1	225.2	347.6	544.0	618.4
135°	196.5	233.4	340.2	516.7	590.3
137.5°	203.3	239.2	334.7	489.4	558.8
140°	210.7	245.8	330.1	462.6	526.3
142.5°	217.4	251.8	327.4	438.6	492.2
145°	224.7	255.8	326.2	415.2	461.0
147.5°	233.3	260.8	324.5	394.4	431.3
150°	241.2	265.7	322.8	380.2	405.8
152.5°	247.2	270.2	320.0	369.4	388.7
155°	254.0	274.2	317.1	359.2	374.5
157.5°	260.9	277.9	314.3	349.5	361.5
160°	267.1	281.0	310.9	339.8	349.5
162.5°	272.8	283.6	307.5	330.5	338.2
165°	276.8	285.3	304.1	322.0	326.8
167.5°	281.3	286.7	300.6	314.5	317.7
170°	284.2	287.8	297.2	307.2	309.2
172.5°	287.0	288.7	293.8	300.6	300.6
175°	288.7	289.3	291.5	295.5	294.4
177.5°	289.8	289.3	289.8	291.8	289.8
180°	289.3	289.3	289.3	289.3	289.3

(END OF REPORT)