

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: P1025844

Luminaire Tested: S124DIP-B795D590UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025844
REPORT IS A COMBINATION OF REPORTS P996504 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

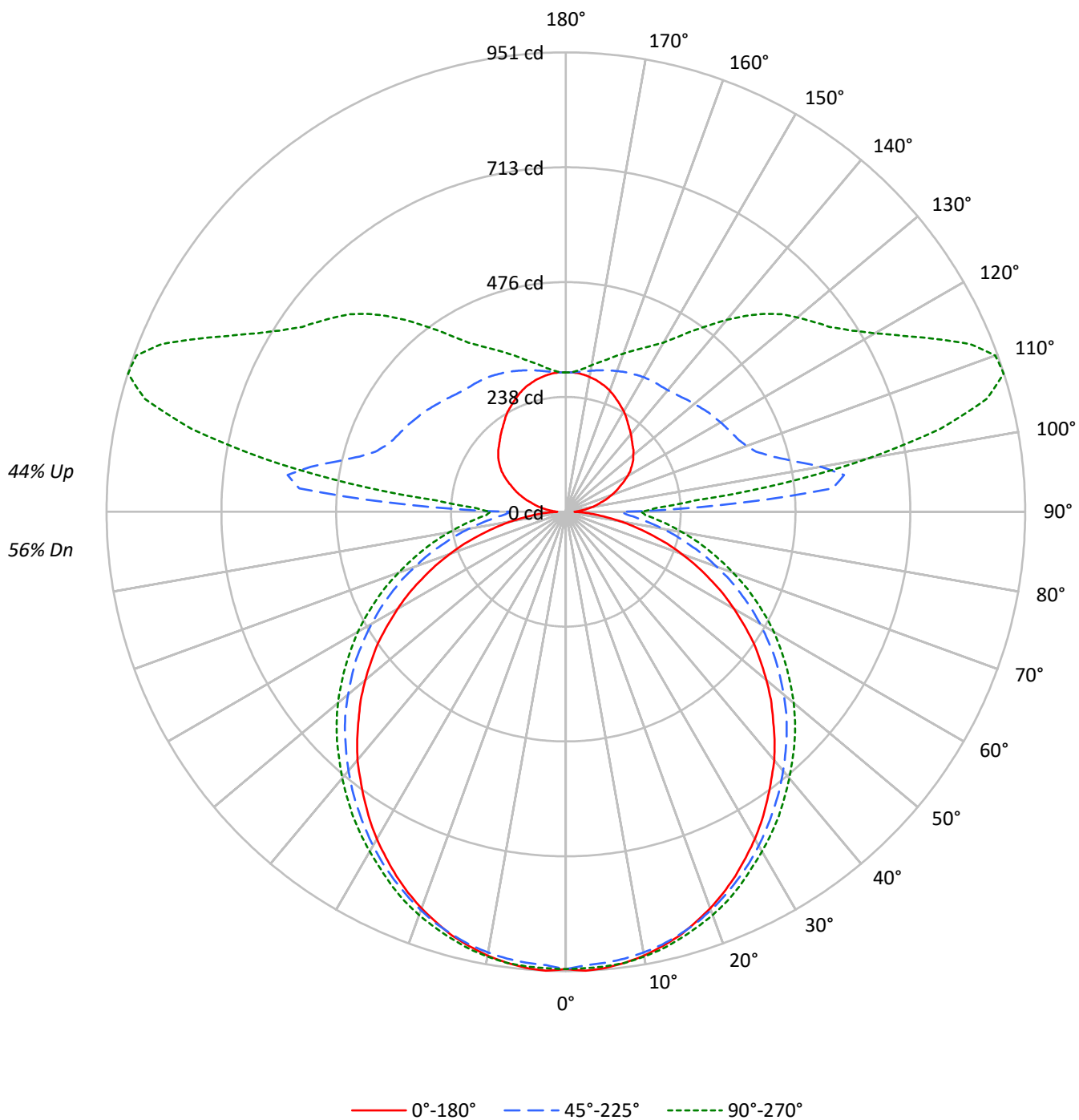
Lumens per Lamp: N/A
Luminaire Lumens: 5334.2 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	74	71	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	64	60	56	55	51	48	46	43	41
3	81	71	63	56	75	66	59	53	56	51	47	48	44	40	40	37	34
4	74	62	54	47	68	58	50	45	50	44	39	42	38	34	36	32	29
5	67	55	47	40	62	52	44	38	45	38	34	38	33	29	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	29	26	29	25	22
7	57	45	36	30	53	42	34	29	36	30	26	31	26	23	26	22	20
8	53	40	32	27	49	38	31	25	33	27	23	28	24	20	24	20	17
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	18	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7721	7721	7721
5°	7742	7519	7533
10°	7692	7371	7350
15°	7619	7205	7144
20°	7513	7025	6944
25°	7393	6827	6729
30°	7263	6630	6508
35°	7116	6428	6313
40°	6997	6236	6110
45°	6824	6054	5931
50°	6674	5848	5741
55°	6520	5650	5523
60°	6281	5403	5319
65°	6020	5136	5071
70°	5700	4833	4786
75°	5256	4494	4514
80°	4754	4149	4230
85°	4090	3803	3999

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.7
10°-20°	257.0	4.8
20°-30°	388.6	7.3
30°-40°	470.2	8.8
40°-50°	497.1	9.3
50°-60°	467.8	8.8
60°-70°	388.2	7.3
70°-80°	272.4	5.1
80°-90°	154.7	2.9
90°-100°	305.7	5.7
100°-110°	503.5	9.4
110°-120°	433.9	8.1
120°-130°	351.9	6.6
130°-140°	283.3	5.3
140°-150°	210.1	3.9
150°-160°	146.2	2.7
160°-170°	86.0	1.6
170°-180°	28.0	0.5
0°-30°	735.4	13.8
0°-40°	1205.6	22.6
0°-60°	2170.4	40.7
0°-90°	2985.7	56.0
90°-120°	1243.1	23.3
90°-150°	2088.4	39.2
90°-180°	2349.0	44.0
0°-180°	5334.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	948	945	937	946	945	90
15°	909	910	906	916	915	256
25°	831	838	841	852	854	383
35°	727	740	751	766	769	455
45°	606	627	647	665	670	469
55°	475	497	529	550	557	423
65°	329	363	399	425	434	326
75°	182	222	266	296	305	194
85°	56	101	148	180	191	59
90°	18	64	115	147	156	13
95°	32	108	554	350	269	31
105°	76	127	442	897	902	81
115°	123	162	381	710	846	123
125°	167	196	360	592	667	149
135°	195	232	336	508	579	151
145°	224	255	325	412	457	141
155°	253	273	316	358	374	117
165°	276	284	303	321	326	78
175°	288	288	291	295	294	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	951.0	947.9	939.4	946.8	945.7
5°	947.9	944.7	937.2	945.7	944.7
7.5°	941.5	939.4	933.0	942.6	941.5
10°	933.0	931.9	926.6	936.2	935.1
12.5°	921.3	921.3	918.2	926.6	926.6
15°	908.6	909.7	906.5	916.0	915.0
17.5°	891.7	894.8	893.8	903.3	902.3
20°	873.6	876.8	877.9	888.5	888.5
22.5°	853.5	857.7	859.9	870.5	872.6
25°	831.2	837.6	840.8	852.4	853.5
27.5°	806.8	816.4	820.6	831.2	832.3
30°	782.5	790.9	798.4	810.0	812.1
32.5°	755.9	766.6	775.0	788.8	790.9
35°	727.3	740.0	750.6	765.5	768.7
37.5°	698.7	713.5	726.3	741.1	744.3
40°	671.1	684.9	699.8	715.7	719.9
42.5°	639.3	655.2	673.3	691.3	694.5
45°	606.5	626.6	646.7	664.8	670.1
47.5°	575.7	595.9	619.2	637.2	643.6
50°	541.8	565.1	588.4	609.6	616.0
52.5°	507.9	531.2	558.7	579.9	586.3
55°	475.0	497.3	529.1	550.3	556.6
57.5°	437.9	465.4	496.2	521.6	526.9
60°	401.8	429.4	464.4	488.8	497.3
62.5°	366.8	397.6	432.6	457.0	465.4
65°	328.7	362.6	398.6	425.2	433.6
67.5°	292.6	328.7	366.8	393.3	401.8
70°	255.5	291.6	331.9	360.5	367.9
72.5°	219.5	256.6	300.0	327.6	336.1
75°	182.4	221.6	266.1	295.8	305.3
77.5°	147.4	188.7	235.4	265.1	275.7
80°	115.6	158.0	204.6	236.4	244.9
82.5°	83.8	128.3	174.9	207.8	217.3
85°	56.2	100.7	148.4	180.2	190.8
87.5°	35.0	78.5	125.1	155.9	165.4
90°	17.6	63.9	115.2	147.0	156.1
92.5°	23.8	96.6	320.7	201.7	188.4
95°	32.5	107.7	554.1	349.6	268.7
97.5°	43.9	108.7	581.1	581.4	456.1
100°	54.8	112.8	536.2	755.2	636.3
102.5°	66.1	118.9	482.8	861.0	794.2
105°	75.8	126.8	441.8	897.0	902.4
107.5°	88.8	136.1	413.2	878.9	950.4
110°	100.9	144.2	398.2	827.2	946.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.2	153.5	387.8	765.4	906.4
115°	123.1	162.4	381.3	710.2	846.2
117.5°	135.6	171.3	375.5	664.7	788.2
120°	147.0	179.0	370.2	631.9	738.7
122.5°	158.3	187.5	364.3	609.3	698.4
125°	166.8	196.4	359.5	591.8	667.1
127.5°	175.9	206.6	353.1	574.0	645.9
130°	182.3	215.4	347.2	554.8	625.9
132.5°	189.6	224.0	342.4	533.0	605.3
135°	195.3	232.2	336.5	507.6	579.2
137.5°	202.1	238.2	332.3	482.0	549.6
140°	209.5	244.8	328.5	456.8	518.8
142.5°	216.4	250.7	326.4	434.2	486.3
145°	223.8	255.0	325.3	412.2	456.6
147.5°	232.3	260.1	323.6	393.0	428.6
150°	240.2	264.9	321.9	379.1	404.6
152.5°	246.5	269.5	319.1	368.4	387.6
155°	253.3	273.4	316.2	358.2	373.5
157.5°	260.1	277.1	313.4	348.5	360.4
160°	266.4	280.2	310.0	338.9	348.5
162.5°	272.0	282.8	306.6	329.6	337.2
165°	276.0	284.5	303.2	321.0	325.9
167.5°	280.5	285.9	299.8	313.6	316.8
170°	283.4	287.0	296.4	306.4	308.3
172.5°	286.2	287.9	293.0	299.8	299.8
175°	287.9	288.5	290.7	294.7	293.6
177.5°	289.0	288.5	289.0	291.0	289.0
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)