

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: P1011400

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011400
REPORT IS A COMBINATION OF REPORTS P989544 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB40-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

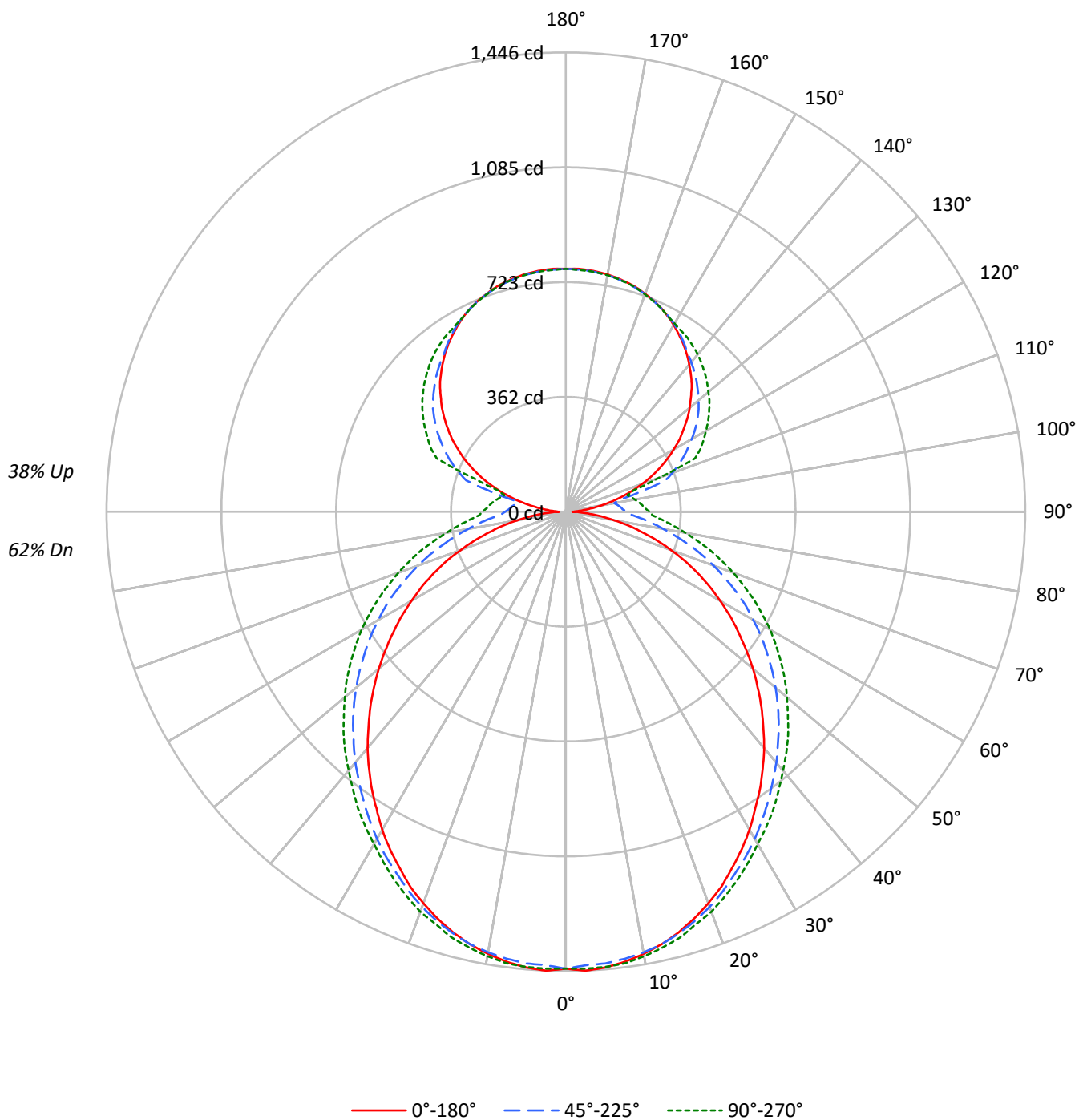
Lumens per Lamp: N/A
Luminaire Lumens: 7166.0 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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: P1011400

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D

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	93	88	84	81	77	74	71	67	64	62	57	56	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	50	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	44	40	37
4	75	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28
6	63	50	42	35	59	47	39	34	42	35	30	36	31	27	31	27	24
7	58	45	37	31	54	43	35	30	38	31	27	33	28	24	29	25	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	33	26	21	29	23	19	26	21	17	23	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

TEST NUMBER: P1011400

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	1.9
10°-20°	388.9	5.4
20°-30°	581.6	8.1
30°-40°	694.4	9.7
40°-50°	726.5	10.1
50°-60°	681.7	9.5
60°-70°	569.4	7.9
70°-80°	407.2	5.7
80°-90°	243.8	3.4
90°-100°	179.2	2.5
100°-110°	242.3	3.4
110°-120°	394.2	5.5
120°-130°	448.3	6.3
130°-140°	452.4	6.3
140°-150°	409.2	5.7
150°-160°	326.9	4.6
160°-170°	210.9	2.9
170°-180°	72.7	1.0
0°-30°	1106.9	15.4
0°-40°	1801.2	25.1
0°-60°	3209.4	44.8
0°-90°	4429.8	61.8
90°-120°	815.8	11.4
90°-150°	2125.7	29.7
90°-180°	2736.0	38.2
0°-180°	7166.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	21	103	191	246	263	17
95°	52	90	173	225	241	55
105°	182	226	242	185	200	192
115°	325	348	409	452	467	322
125°	452	457	505	539	551	405
135°	560	562	582	612	618	432
145°	645	647	648	662	668	403
155°	708	707	708	711	707	326
165°	747	746	745	749	746	211
175°	765	762	762	766	762	73
180°	765	765	765	765	765	

TEST NUMBER: P1011400

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	21.0	103.3	190.6	246.2	262.9
92.5°	31.9	95.9	179.3	234.9	249.6
95°	51.9	89.7	172.7	225.2	240.9
97.5°	78.8	119.3	163.9	215.4	231.6
100°	110.1	171.6	155.0	205.0	221.3
102.5°	146.0	197.3	168.9	194.0	210.8
105°	181.8	225.7	241.9	185.3	200.4
107.5°	218.4	256.4	329.1	283.9	223.6
110°	254.9	287.6	356.5	378.5	309.7

TEST NUMBER: P1011400

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.2	317.1	382.9	427.2	440.1
115°	325.4	347.6	409.1	452.4	467.3
117.5°	360.6	377.2	433.3	475.4	488.6
120°	391.5	404.4	457.8	498.4	509.4
122.5°	424.5	431.6	482.4	519.7	531.2
125°	452.4	457.0	504.6	538.7	550.8
127.5°	482.0	484.9	527.0	560.0	569.8
130°	509.2	512.2	545.9	577.8	586.1
132.5°	533.8	538.3	563.5	594.0	603.3
135°	560.5	562.4	581.9	611.8	617.9
137.5°	583.2	586.3	598.3	626.2	632.9
140°	604.4	607.8	614.3	640.0	646.7
142.5°	625.5	627.3	629.0	651.1	657.2
145°	644.8	647.2	648.3	661.9	668.2
147.5°	661.9	664.8	665.9	671.7	675.2
150°	679.0	680.7	681.8	683.0	684.3
152.5°	694.3	694.9	695.5	697.7	694.9
155°	708.5	707.4	708.0	710.8	707.4
157.5°	719.9	719.9	719.3	722.7	718.2
160°	730.1	729.5	729.0	732.4	728.4
162.5°	739.8	738.1	737.5	741.5	738.1
165°	747.2	745.5	744.9	749.4	745.5
167.5°	753.4	751.1	751.1	755.7	751.1
170°	758.5	756.2	756.2	760.8	756.2
172.5°	761.9	759.1	759.7	764.2	759.1
175°	764.8	761.9	762.5	766.5	761.9
177.5°	765.9	763.1	763.6	768.2	762.5
180°	764.8	764.8	764.8	764.8	764.8

(END OF REPORT)