

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: P1011401

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011401
REPORT IS A COMBINATION OF REPORTS P989545 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-D1
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

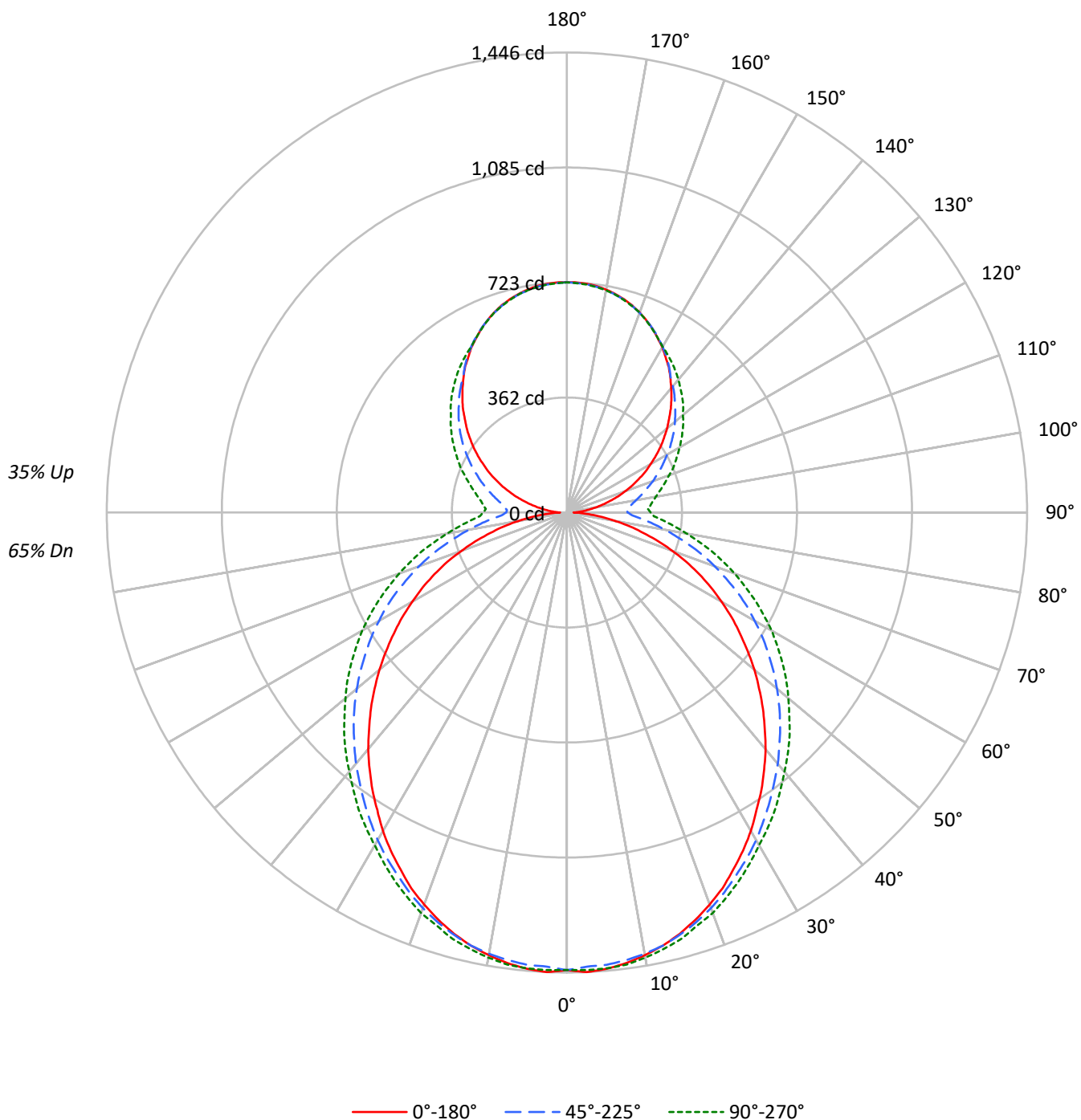
Lumens per Lamp: N/A
Luminaire Lumens: 6839.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	111	111	111	111		104	104	104	104		92	92	92		80	80	80		70	70	70
1	100	95	90	86		93	89	85	81		78	75	72		69	66	64		59	58	56
2	90	82	75	69		84	77	71	66		68	63	59		59	56	52		52	49	46
3	82	72	64	57		77	67	60	54		59	54	49		52	48	44		45	42	39
4	75	63	55	48		70	60	52	46		53	46	41		46	41	37		40	36	33
5	69	56	47	41		64	53	45	39		47	41	36		41	36	32		36	32	29
6	63	50	42	36		59	48	40	34		42	36	31		37	32	28		33	28	25
7	59	46	37	31		55	43	35	30		38	32	27		34	29	25		30	26	22
8	54	41	33	28		51	39	32	26		35	29	24		31	26	22		27	23	20
9	51	38	30	25		47	36	29	24		32	26	22		29	23	20		25	21	18
10	47	35	27	22		44	33	26	21		30	24	20		26	21	18		23	19	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	2.0
10°-20°	388.9	5.7
20°-30°	581.6	8.5
30°-40°	694.4	10.2
40°-50°	726.5	10.6
50°-60°	681.7	10.0
60°-70°	569.4	8.3
70°-80°	407.2	6.0
80°-90°	243.8	3.6
90°-100°	198.8	2.9
100°-110°	252.9	3.7
110°-120°	314.7	4.6
120°-130°	358.3	5.2
130°-140°	373.9	5.5
140°-150°	352.8	5.2
150°-160°	293.7	4.3
160°-170°	195.5	2.9
170°-180°	68.5	1.0
0°-30°	1106.9	16.2
0°-40°	1801.2	26.3
0°-60°	3209.4	46.9
0°-90°	4429.8	64.8
90°-120°	766.4	11.2
90°-150°	1851.4	27.1
90°-180°	2409.0	35.2
0°-180°	6839.0	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°	51	116	197	248	264	50
105°	140	179	252	296	311	150
115°	249	270	325	363	375	247
125°	358	360	404	435	444	320
135°	462	464	480	506	513	356
145°	558	558	559	571	575	348
155°	637	637	638	640	636	293
165°	694	692	692	696	692	196
175°	722	719	719	723	719	69
180°	723	723	723	723	723	

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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	103.4	190.6	246.2	262.9
92.5°	35.8	106.7	188.4	241.8	254.7
95°	50.7	115.8	197.2	247.9	263.6
97.5°	70.8	130.1	207.1	256.9	271.9
100°	91.4	144.9	219.8	266.9	283.8
102.5°	115.4	161.0	235.4	280.9	296.1
105°	140.4	179.1	251.6	295.5	310.7
107.5°	168.4	201.9	268.4	312.4	325.9
110°	194.1	223.4	287.3	330.2	341.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.5	245.0	304.6	346.5	360.6
115°	249.3	269.8	325.1	363.3	375.3
117.5°	278.3	291.5	343.5	381.1	392.0
120°	303.5	314.7	363.6	399.0	408.9
122.5°	331.4	336.7	384.2	416.9	426.2
125°	358.2	359.9	404.1	434.8	443.5
127.5°	384.3	386.1	424.2	452.1	460.8
130°	410.5	413.4	443.1	470.5	475.9
132.5°	435.0	439.5	461.9	487.3	495.4
135°	461.7	463.6	480.2	506.2	512.8
137.5°	486.1	487.5	500.1	522.3	528.4
140°	510.2	513.1	518.3	541.3	545.1
142.5°	533.5	534.8	535.9	555.7	560.7
145°	557.9	557.5	559.2	571.1	575.1
147.5°	577.4	579.6	581.4	586.1	588.9
150°	599.5	600.7	601.8	601.8	601.5
152.5°	617.7	619.4	620.0	621.1	618.3
155°	637.0	637.0	637.6	639.9	635.9
157.5°	653.5	653.0	653.5	655.8	652.4
160°	668.9	667.7	667.7	670.6	668.3
162.5°	682.5	680.8	681.4	684.2	680.2
165°	693.9	692.2	692.2	695.6	691.6
167.5°	703.5	701.3	701.8	705.2	701.8
170°	711.5	709.2	709.2	713.2	709.2
172.5°	717.7	715.5	715.5	718.9	714.9
175°	721.7	719.4	719.4	722.9	718.9
177.5°	724.0	721.7	721.7	725.1	721.1
180°	723.4	723.4	723.4	723.4	723.4

(END OF REPORT)