

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: P1012020

Luminaire Tested: S123DIP-B775D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012020
REPORT IS A COMBINATION OF REPORTS P990389 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D365UB40-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

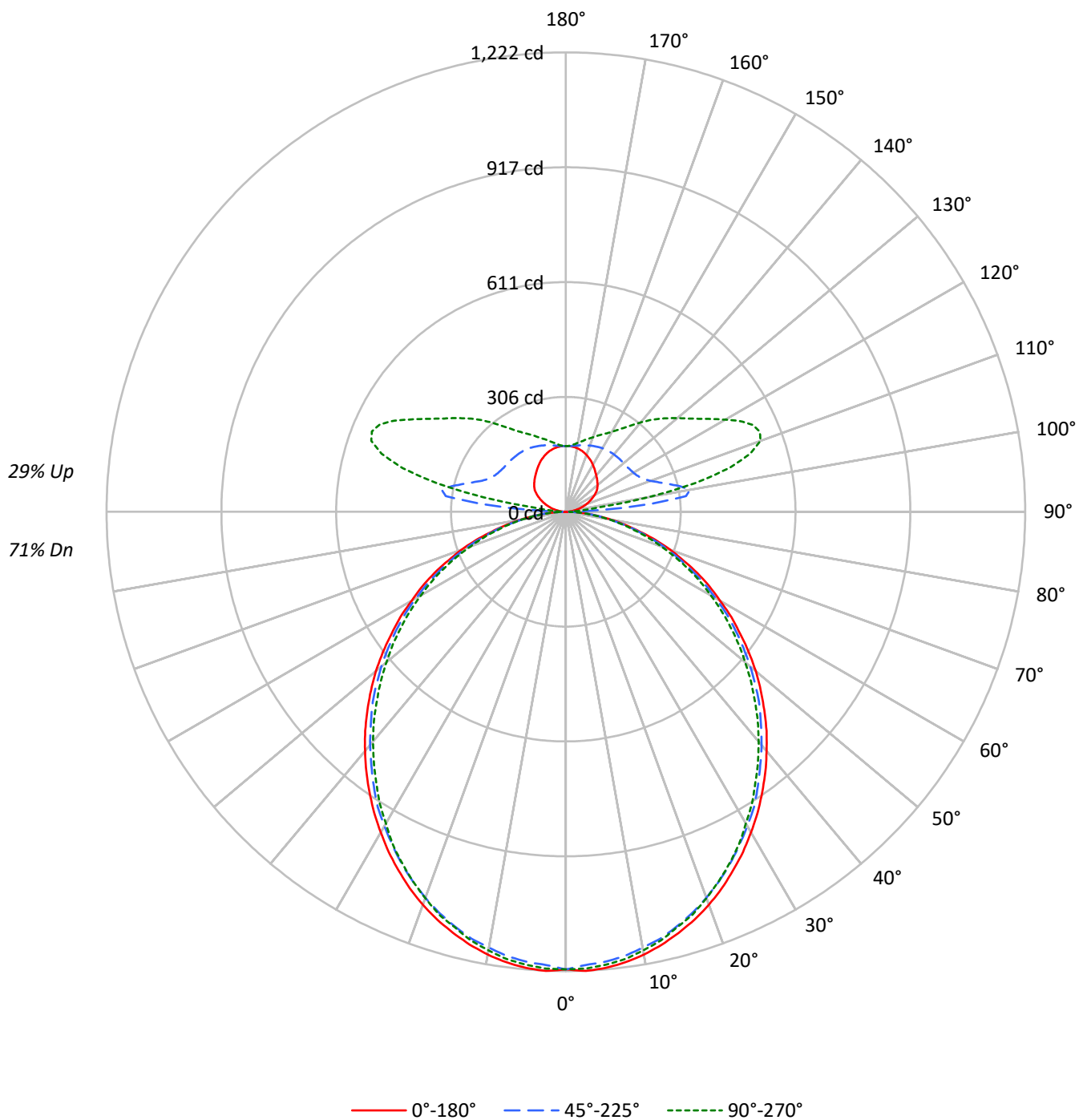
Lumens per Lamp: N/A
Luminaire Lumens: 4486.1 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	47	43	46	42	39
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	37	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	33	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	36	29	24	33	27	22	30	25	21	27	23	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13103	13103	13103
5°	13135	12651	12631
10°	13018	12222	12097
15°	12837	11777	11514
20°	12630	11282	10937
25°	12361	10762	10320
30°	12067	10221	9670
35°	11760	9669	9025
40°	11437	9091	8391
45°	11083	8527	7728
50°	10723	7898	7063
55°	10259	7243	6387
60°	9783	6520	5671
65°	9336	5738	4922
70°	8693	4872	4048
75°	7764	3858	3143
80°	6705	2712	2223
85°	5225	1456	1113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11083 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	2.6
10°-20°	324.0	7.2
20°-30°	478.6	10.7
30°-40°	558.9	12.5
40°-50°	561.9	12.5
50°-60°	493.6	11.0
60°-70°	367.6	8.2
70°-80°	209.2	4.7
80°-90°	60.4	1.3
90°-100°	99.3	2.2
100°-110°	277.5	6.2
110°-120°	270.6	6.0
120°-130°	215.4	4.8
130°-140°	170.1	3.8
140°-150°	126.9	2.8
150°-160°	88.5	2.0
160°-170°	52.0	1.2
170°-180°	16.9	0.4
0°-30°	917.4	20.4
0°-40°	1476.3	32.9
0°-60°	2531.7	56.4
0°-90°	3169.0	70.6
90°-120°	647.3	14.4
90°-150°	1159.7	25.9
90°-180°	1317.0	29.4
0°-180°	4486.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1213	1202	1212	1210	116
15°	1160	1156	1142	1150	1144	327
25°	1053	1047	1033	1034	1031	485
35°	911	904	891	884	879	570
45°	746	742	728	716	711	576
55°	566	565	552	540	535	507
65°	386	381	370	362	359	381
75°	204	200	197	192	188	218
85°	54	52	52	50	50	58
90°	1	4	9	10	10	5
95°	12	39	210	61	41	13
105°	41	61	284	497	450	44
115°	72	90	218	477	547	72
125°	101	119	203	368	431	90
135°	118	141	200	303	350	91
145°	135	154	198	248	273	84
155°	153	165	191	218	227	70
165°	167	172	183	194	198	47
175°	174	174	176	178	178	17
180°	175	175	175	175	175	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.3	1217.3	1217.3	1217.3	1217.3
2.5°	1222.5	1218.3	1206.8	1217.3	1216.2
5°	1218.3	1213.1	1201.6	1212.0	1209.9
7.5°	1208.9	1203.7	1192.1	1201.6	1200.5
10°	1196.3	1191.1	1177.5	1186.9	1184.8
12.5°	1179.6	1175.4	1162.8	1169.1	1168.1
15°	1159.7	1155.5	1141.9	1150.3	1144.0
17.5°	1137.7	1132.5	1118.9	1125.2	1123.1
20°	1112.6	1106.3	1092.7	1096.9	1093.8
22.5°	1084.3	1078.1	1064.5	1067.6	1063.4
25°	1052.9	1046.7	1033.1	1034.1	1031.0
27.5°	1020.5	1014.2	999.6	1000.6	997.5
30°	984.9	979.7	965.0	965.0	957.7
32.5°	949.3	942.0	931.5	924.2	921.1
35°	910.6	904.3	890.7	884.4	879.2
37.5°	871.9	863.5	849.9	842.6	839.4
40°	831.0	824.8	810.1	801.7	797.6
42.5°	790.2	782.9	768.2	759.9	755.7
45°	746.3	742.1	728.5	715.9	710.7
47.5°	703.4	697.1	684.5	672.0	667.8
50°	659.4	654.2	640.6	629.0	622.8
52.5°	613.3	610.2	595.5	586.1	579.8
55°	566.2	565.2	551.6	540.1	534.8
57.5°	522.3	518.1	507.6	497.2	490.9
60°	474.1	473.1	460.5	451.1	445.9
62.5°	431.2	428.1	415.5	406.1	403.0
65°	386.2	381.0	370.5	362.1	359.0
67.5°	338.1	333.9	325.5	318.2	314.0
70°	295.2	288.9	282.6	275.3	270.0
72.5°	250.2	246.0	238.6	232.4	230.3
75°	204.1	199.9	196.8	191.5	188.4
77.5°	163.3	161.2	157.0	152.8	152.8
80°	123.5	120.4	118.3	117.2	117.2
82.5°	84.8	84.8	84.8	82.7	81.6
85°	54.4	52.3	52.3	50.2	50.2
87.5°	27.2	24.1	23.0	22.0	22.0
90°	0.7	4.2	8.8	9.9	10.3
92.5°	5.3	21.2	65.8	22.4	18.7
95°	12.0	39.1	209.7	61.2	41.0
97.5°	19.1	44.7	322.5	153.8	84.2
100°	26.2	49.3	334.9	321.8	221.7
102.5°	33.6	54.6	311.9	430.9	351.1
105°	41.0	60.6	284.3	497.2	449.8
107.5°	48.8	67.7	259.9	526.4	514.2
110°	57.3	75.0	239.8	527.2	550.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.1	82.6	226.3	507.3	558.4
115°	72.5	90.4	217.5	476.8	547.1
117.5°	79.9	97.8	211.5	444.3	522.3
120°	87.7	105.2	207.6	413.6	489.8
122.5°	94.4	112.2	205.1	389.4	459.4
125°	100.8	119.0	203.0	367.8	431.4
127.5°	105.7	125.4	201.9	350.1	407.4
130°	110.3	131.0	200.9	333.8	387.6
132.5°	113.9	136.1	200.5	318.6	368.1
135°	118.1	140.9	200.2	302.9	349.7
137.5°	122.0	144.8	199.4	288.0	330.3
140°	125.9	148.4	199.1	273.5	309.8
142.5°	130.1	151.6	198.4	260.2	290.7
145°	134.7	154.4	197.7	248.4	273.4
147.5°	139.3	157.4	196.6	239.2	258.5
150°	143.9	159.8	195.2	231.1	245.8
152.5°	148.5	162.5	193.4	224.0	235.2
155°	153.1	165.1	191.3	217.5	226.7
157.5°	156.7	167.4	189.5	211.1	218.5
160°	160.9	169.4	187.4	205.2	210.8
162.5°	164.1	170.8	185.3	199.8	203.7
165°	167.3	172.0	183.2	194.3	197.7
167.5°	169.7	173.1	181.1	189.5	191.7
170°	171.9	173.6	178.9	185.3	186.4
172.5°	173.3	174.2	177.2	181.6	181.4
175°	174.3	174.5	175.8	178.2	177.9
177.5°	175.0	174.7	174.7	176.1	175.4
180°	174.7	174.7	174.7	174.7	174.7

(END OF REPORT)