

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P334018

Luminaire Tested: **S123DW-S1000D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334018  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DW-S1000D940-4F0-1E-UDD-F  
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

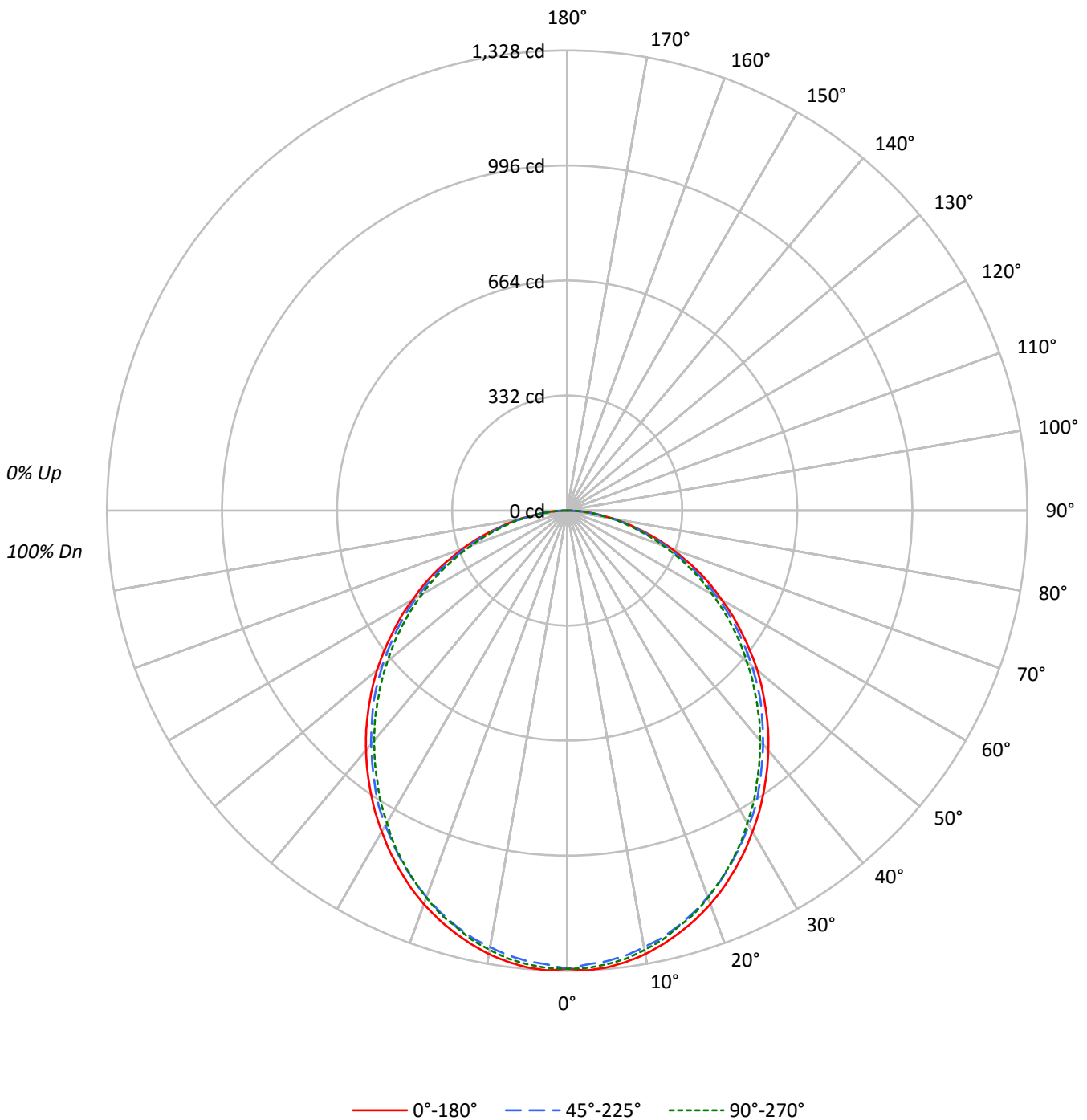
Lumens per Lamp: N/A  
Luminaire Lumens: 3441.9 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: 25 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14235	14235	14235
5°	14302	14105	14203
10°	14207	13983	14070
15°	14041	13825	13850
20°	13846	13599	13612
25°	13587	13330	13303
30°	13300	13032	12932
35°	13000	12716	12552
40°	12687	12368	12175
45°	12342	12049	11753
50°	11997	11653	11330
55°	11545	11247	10905
60°	11089	10770	10428
65°	10687	10254	9933
70°	10093	9662	9234
75°	9220	8892	8513
80°	8319	7965	7897
85°	7299	7027	6743



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.7	3.6
10°-20°	352.0	10.2
20°-30°	519.9	15.1
30°-40°	607.2	17.6
40°-50°	610.5	17.7
50°-60°	536.3	15.6
60°-70°	399.4	11.6
70°-80°	227.3	6.6
80°-90°	64.6	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	996.7	29.0
0°-40°	1603.9	46.6
0°-60°	2750.6	79.9
0°-90°	3441.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3441.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1324	1318	1305	1317	1314	126
15°	1260	1255	1241	1250	1243	355
25°	1144	1137	1122	1124	1120	527
35°	989	982	968	961	955	619
45°	811	806	792	778	772	626
55°	615	614	599	587	581	551
65°	420	414	403	394	390	414
75°	222	217	214	208	205	237
85°	59	57	57	55	55	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1328.2	1323.6	1311.1	1322.5	1321.4
5°	1323.6	1318.0	1305.4	1316.8	1314.5
7.5°	1313.4	1307.7	1295.2	1305.4	1304.3
10°	1299.8	1294.1	1279.3	1289.5	1287.3
12.5°	1281.6	1277.0	1263.4	1270.2	1269.1
15°	1260.0	1255.4	1240.6	1249.7	1242.9
17.5°	1236.1	1230.4	1215.6	1222.4	1220.2
20°	1208.8	1202.0	1187.2	1191.7	1188.3
22.5°	1178.1	1171.3	1156.5	1159.9	1155.3
25°	1144.0	1137.1	1122.4	1123.5	1120.1
27.5°	1108.7	1101.9	1086.0	1087.1	1083.7
30°	1070.1	1064.4	1048.5	1048.5	1040.5
32.5°	1031.4	1023.4	1012.1	1004.1	1000.7
35°	989.3	982.5	967.7	960.9	955.2
37.5°	947.2	938.1	923.4	915.4	912.0
40°	902.9	896.1	880.2	871.1	866.5
42.5°	858.5	850.6	834.7	825.6	821.0
45°	810.8	806.2	791.5	777.8	772.1
47.5°	764.2	757.3	743.7	730.0	725.5
50°	716.4	710.7	695.9	683.4	676.6
52.5°	666.4	663.0	647.0	636.8	630.0
55°	615.2	614.1	599.3	586.8	581.1
57.5°	567.4	562.9	551.5	540.1	533.3
60°	515.1	514.0	500.3	490.1	484.4
62.5°	468.5	465.1	451.4	441.2	437.8
65°	419.6	413.9	402.6	393.5	390.0
67.5°	367.3	362.8	353.7	345.7	341.1
70°	320.7	313.9	307.0	299.1	293.4
72.5°	271.8	267.2	259.3	252.4	250.2
75°	221.7	217.2	213.8	208.1	204.7
77.5°	177.4	175.1	170.6	166.0	166.0
80°	134.2	130.8	128.5	127.4	127.4
82.5°	92.1	92.1	92.1	89.8	88.7
85°	59.1	56.9	56.9	54.6	54.6
87.5°	29.6	26.2	25.0	23.9	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)