

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: P334015

Luminaire Tested: **S123DW-S340D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334015  
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-S340D940-4F0-1E-UDD-F  
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 340 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

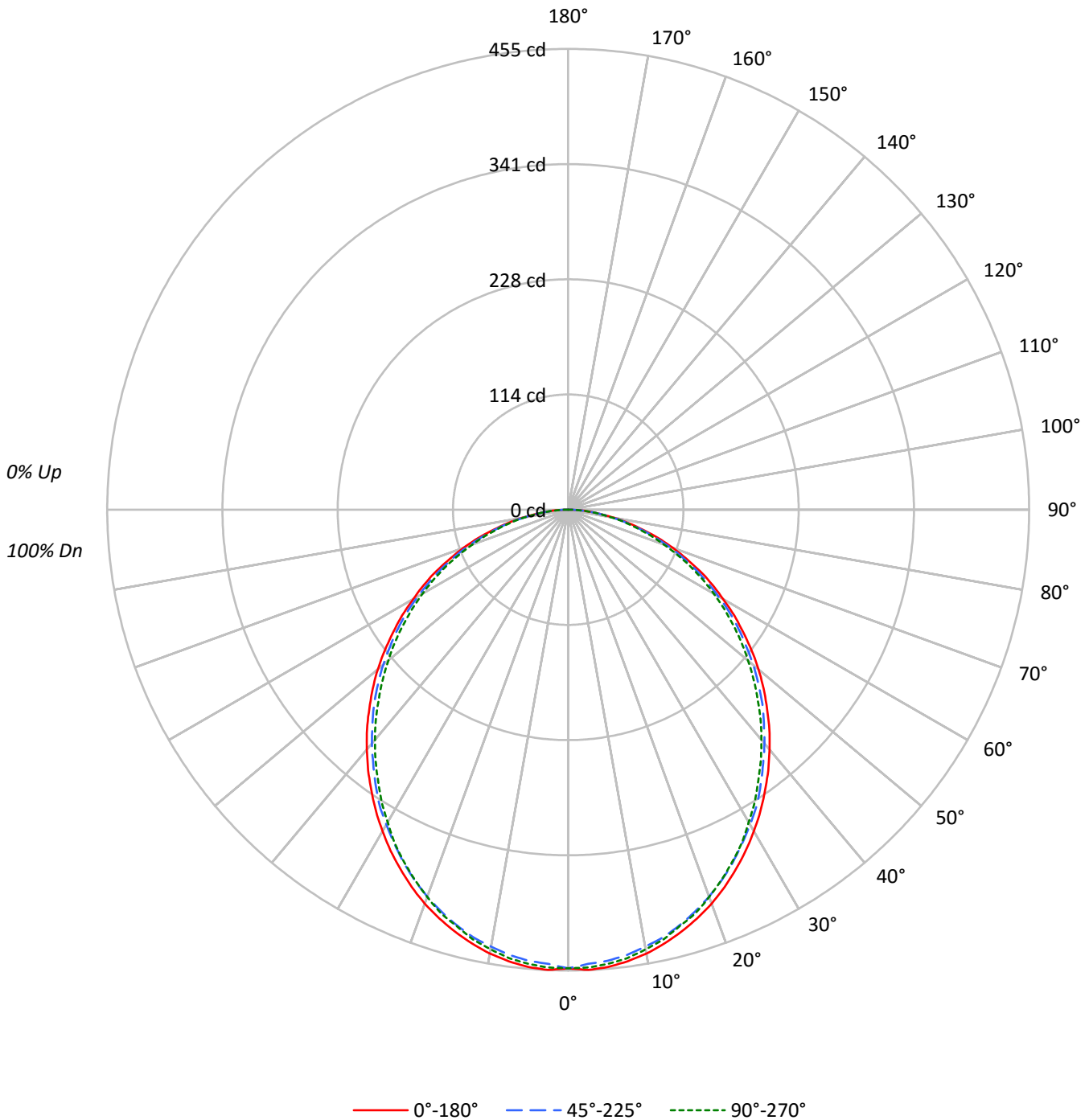
Lumens per Lamp: N/A  
Luminaire Lumens: 1178.5 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.6  
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



TEST NUMBER: P334015  
CATALOG NUMBER: S123DW-S340D940-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P334015

CATALOG NUMBER: S123DW-S340D940-4F0-1E-UDD-F

**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°	4874	4874	4874
5°	4897	4830	4863
10°	4864	4787	4817
15°	4807	4734	4743
20°	4741	4656	4661
25°	4652	4564	4555
30°	4554	4462	4427
35°	4451	4353	4297
40°	4343	4235	4169
45°	4226	4125	4025
50°	4108	3990	3880
55°	3952	3851	3734
60°	3798	3688	3571
65°	3660	3510	3400
70°	3456	3308	3163
75°	3157	3044	2915
80°	2845	2727	2703
85°	2495	2408	2309



TEST NUMBER: P334015

CATALOG NUMBER: S123DW-S340D940-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	3.6
10°-20°	120.5	10.2
20°-30°	178.0	15.1
30°-40°	207.9	17.6
40°-50°	209.0	17.7
50°-60°	183.6	15.6
60°-70°	136.7	11.6
70°-80°	77.8	6.6
80°-90°	22.1	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°	341.2	29.0
0°-40°	549.1	46.6
0°-60°	941.8	79.9
0°-90°	1178.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1178.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	453	451	447	451	450	43
15°	431	430	425	428	426	122
25°	392	389	384	385	384	180
35°	339	336	331	329	327	212
45°	278	276	271	266	264	214
55°	211	210	205	201	199	189
65°	144	142	138	135	134	142
75°	76	74	73	71	70	81
85°	20	20	20	19	19	23
90°	0	0	0	0	0	



TEST NUMBER: P334015

CATALOG NUMBER: S123DW-S340D940-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	452.8	452.8	452.8	452.8	452.8
2.5°	454.8	453.2	448.9	452.8	452.4
5°	453.2	451.2	447.0	450.9	450.1
7.5°	449.7	447.7	443.5	447.0	446.6
10°	445.0	443.1	438.0	441.5	440.7
12.5°	438.8	437.2	432.6	434.9	434.5
15°	431.4	429.8	424.8	427.9	425.6
17.5°	423.2	421.3	416.2	418.5	417.8
20°	413.9	411.5	406.5	408.0	406.9
22.5°	403.4	401.0	396.0	397.1	395.6
25°	391.7	389.3	384.3	384.7	383.5
27.5°	379.6	377.3	371.8	372.2	371.0
30°	366.4	364.4	359.0	359.0	356.2
32.5°	353.1	350.4	346.5	343.8	342.6
35°	338.7	336.4	331.3	329.0	327.0
37.5°	324.3	321.2	316.1	313.4	312.3
40°	309.1	306.8	301.4	298.2	296.7
42.5°	294.0	291.2	285.8	282.7	281.1
45°	277.6	276.0	271.0	266.3	264.4
47.5°	261.6	259.3	254.6	250.0	248.4
50°	245.3	243.3	238.3	234.0	231.7
52.5°	228.2	227.0	221.5	218.0	215.7
55°	210.6	210.2	205.2	200.9	199.0
57.5°	194.3	192.7	188.8	184.9	182.6
60°	176.4	176.0	171.3	167.8	165.9
62.5°	160.4	159.2	154.6	151.1	149.9
65°	143.7	141.7	137.8	134.7	133.5
67.5°	125.8	124.2	121.1	118.4	116.8
70°	109.8	107.5	105.1	102.4	100.5
72.5°	93.1	91.5	88.8	86.4	85.7
75°	75.9	74.4	73.2	71.2	70.1
77.5°	60.7	60.0	58.4	56.8	56.8
80°	45.9	44.8	44.0	43.6	43.6
82.5°	31.5	31.5	31.5	30.8	30.4
85°	20.2	19.5	19.5	18.7	18.7
87.5°	10.1	9.0	8.6	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)