

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: P334185

Luminaire Tested: **S124DS-S350D935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334185  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DS-S350D935-4F0-1E-UDD-F  
Description: DEFINE 4 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 350 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

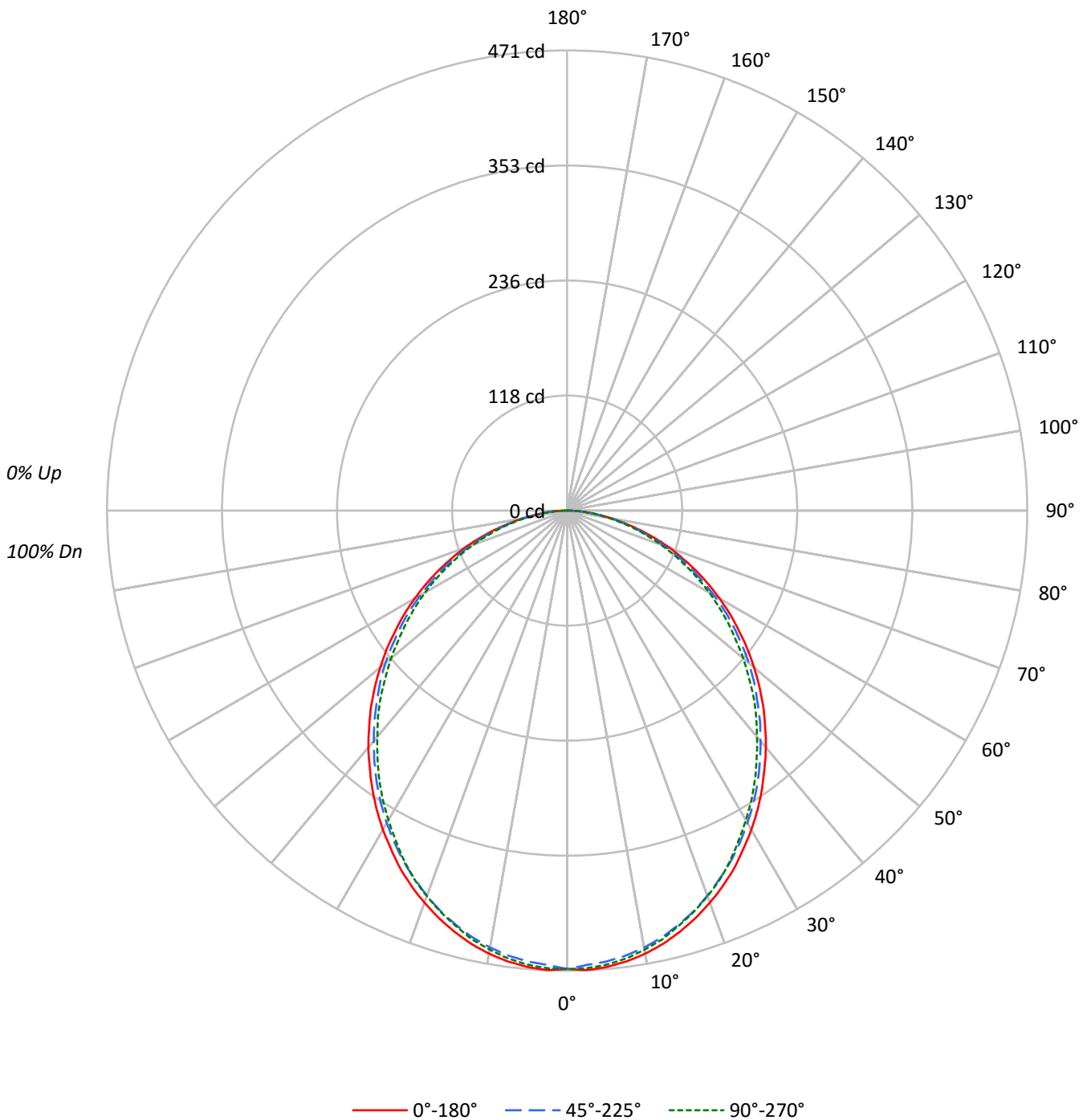
Lumens per Lamp: N/A  
Luminaire Lumens: 1204.2 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

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



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39					39			
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	3788	3788	3788
5°	3799	3754	3780
10°	3775	3722	3741
15°	3729	3670	3679
20°	3669	3604	3607
25°	3600	3529	3519
30°	3515	3442	3410
35°	3427	3349	3304
40°	3335	3245	3186
45°	3240	3142	3081
50°	3135	3051	2955
55°	3022	2932	2836
60°	2908	2798	2713
65°	2779	2670	2564
70°	2637	2502	2405
75°	2414	2299	2240
80°	2148	2064	2008
85°	1880	1806	1778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.2	3.7
10°-20°	124.6	10.3
20°-30°	183.4	15.2
30°-40°	213.1	17.7
40°-50°	213.1	17.7
50°-60°	186.4	15.5
60°-70°	138.4	11.5
70°-80°	78.5	6.5
80°-90°	22.5	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°	352.2	29.2
0°-40°	565.3	46.9
0°-60°	964.8	80.1
0°-90°	1204.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	469	469	469	469	469	
5°	469	467	463	467	466	44
15°	446	445	439	441	440	126
25°	404	402	396	397	395	186
35°	348	345	340	337	335	217
45°	284	281	275	271	270	219
55°	215	214	208	204	202	192
65°	146	144	140	136	134	144
75°	77	76	74	72	72	82
85°	20	20	20	20	19	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	469.2	469.2	469.2	469.2	469.2
2.5°	470.7	469.5	465.4	469.2	468.8
5°	468.8	467.3	463.2	467.3	466.5
7.5°	465.4	463.9	459.4	462.8	462.4
10°	460.5	459.0	454.1	457.1	456.4
12.5°	454.1	452.6	447.4	450.7	449.6
15°	446.2	444.7	439.1	441.3	440.2
17.5°	437.2	435.3	430.1	431.6	430.8
20°	427.1	425.2	419.5	420.7	419.9
22.5°	416.2	413.5	407.9	410.1	408.6
25°	404.1	401.5	396.2	396.6	395.1
27.5°	390.6	388.0	383.1	382.3	380.4
30°	377.1	374.1	369.2	367.7	365.8
32.5°	362.8	360.1	354.9	353.0	351.1
35°	347.7	345.1	339.8	337.2	335.3
37.5°	331.9	329.7	324.1	321.4	318.8
40°	316.5	313.5	307.9	304.1	302.3
42.5°	300.0	298.5	292.1	287.6	286.5
45°	283.8	281.2	275.2	271.0	269.9
47.5°	266.9	265.0	259.4	254.9	251.9
50°	249.6	248.1	242.9	237.6	235.3
52.5°	232.7	230.8	225.2	220.7	217.7
55°	214.7	213.5	208.3	203.8	201.5
57.5°	197.7	196.6	191.4	186.8	184.6
60°	180.1	178.2	173.3	169.9	168.0
62.5°	162.8	161.3	156.0	153.0	151.1
65°	145.5	143.6	139.8	136.1	134.2
67.5°	127.8	126.3	122.6	118.8	118.4
70°	111.7	109.0	106.0	103.0	101.9
72.5°	94.4	91.7	89.5	87.2	86.1
75°	77.4	75.6	73.7	72.2	71.8
77.5°	60.9	60.1	58.3	57.9	56.8
80°	46.2	45.1	44.4	43.6	43.2
82.5°	32.0	31.6	31.6	31.2	30.8
85°	20.3	20.3	19.5	19.5	19.2
87.5°	9.8	9.4	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)