

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: P333816

Luminaire Tested: **S122DW-S485D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333816  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DW-S485D835-4F0-1E-UDD-F  
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 485 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1899.8 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

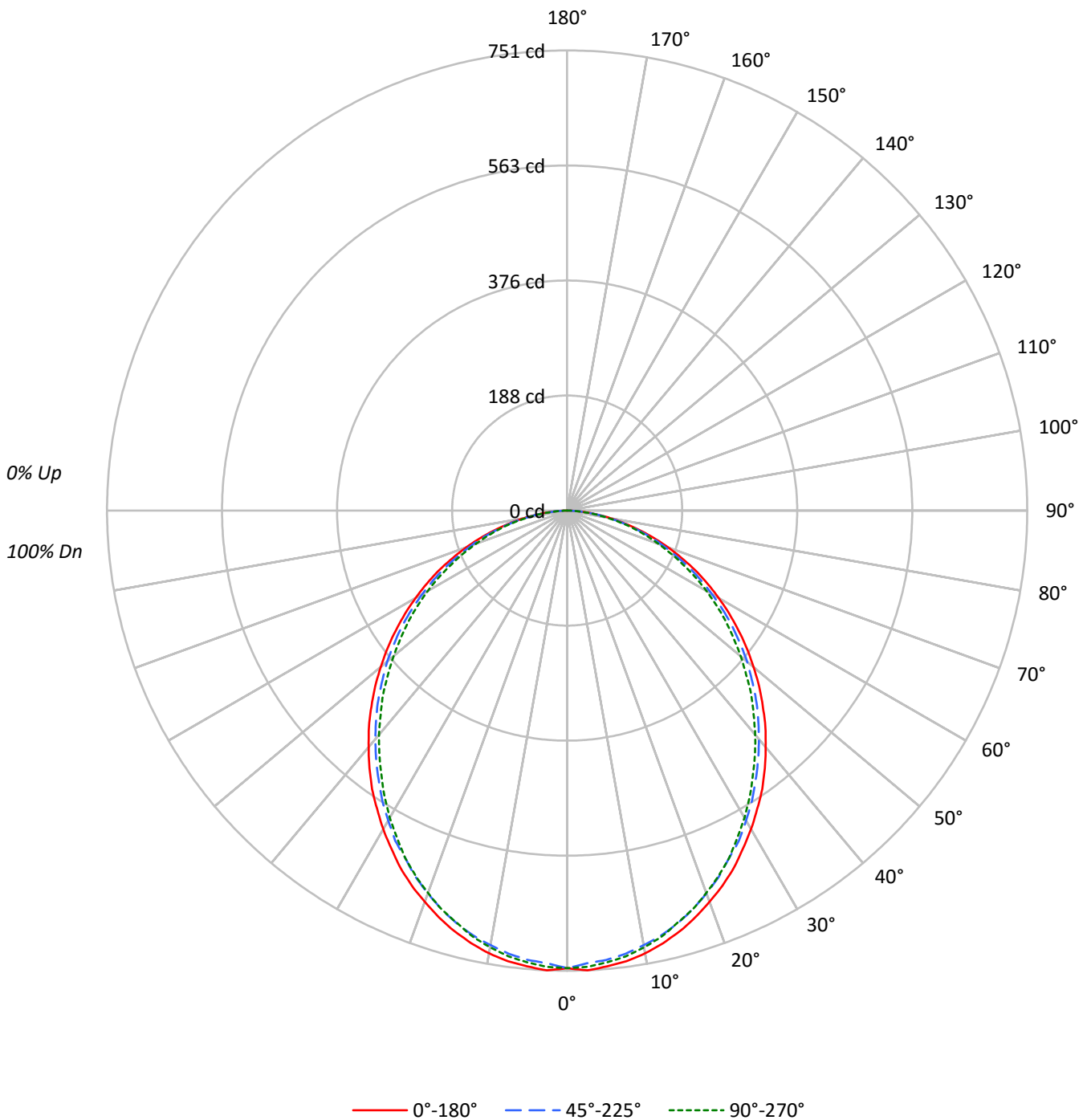
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37	32	27	26

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

	0°	45°	90°
0°	12056	12056	12056
5°	12102	11929	11998
10°	12031	11808	11867
15°	11881	11654	11642
20°	11672	11424	11412
25°	11462	11141	11141
30°	11192	10884	10789
35°	10939	10573	10417
40°	10625	10260	10064
45°	10312	9951	9707
50°	9975	9630	9289
55°	9621	9258	8912
60°	9229	8812	8486
65°	8806	8367	7981
70°	8271	7832	7459
75°	7523	7211	7031
80°	6676	6471	6146
85°	5446	5187	4650



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.3	3.7
10°-20°	197.7	10.4
20°-30°	290.6	15.3
30°-40°	337.5	17.8
40°-50°	337.1	17.7
50°-60°	293.9	15.5
60°-70°	217.3	11.4
70°-80°	122.9	6.5
80°-90°	32.4	1.7
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°	558.6	29.4
0°-40°	896.1	47.2
0°-60°	1527.2	80.4
0°-90°	1899.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1899.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	747	744	736	742	740	71
15°	711	706	697	700	696	200
25°	643	638	625	627	625	296
35°	555	548	536	532	528	347
45°	452	447	436	428	425	349
55°	342	338	329	320	317	306
65°	230	226	219	212	209	228
75°	121	119	116	111	113	129
85°	29	29	28	26	25	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	746.7	746.7	746.7	746.7	746.7
2.5°	751.1	747.5	739.6	746.7	745.3
5°	746.7	743.9	736.0	741.7	740.3
7.5°	741.7	737.4	729.5	735.3	733.8
10°	733.8	728.8	720.2	725.9	723.8
12.5°	723.1	718.7	710.1	713.7	712.3
15°	710.8	706.5	697.2	700.1	696.5
17.5°	695.8	691.5	682.1	685.7	682.1
20°	679.3	674.9	664.9	667.0	664.2
22.5°	662.7	656.3	646.9	646.9	645.5
25°	643.4	637.6	625.4	626.8	625.4
27.5°	621.8	616.8	607.5	605.3	601.7
30°	600.3	594.5	583.8	581.6	578.7
32.5°	577.3	573.0	561.5	557.2	554.3
35°	555.0	547.9	536.4	532.1	528.5
37.5°	529.9	523.4	512.0	506.9	503.3
40°	504.1	498.3	486.8	480.4	477.5
42.5°	478.9	473.2	461.7	454.5	450.2
45°	451.6	446.6	435.8	427.9	425.1
47.5°	425.1	420.0	408.6	400.7	396.4
50°	397.1	393.5	383.4	373.4	369.8
52.5°	369.8	364.8	355.4	347.5	342.5
55°	341.8	337.5	328.9	320.2	316.6
57.5°	313.8	310.2	300.9	292.2	289.4
60°	285.8	282.9	272.9	265.0	262.8
62.5°	258.5	253.5	246.3	239.1	236.2
65°	230.5	226.2	219.0	212.5	208.9
67.5°	201.8	198.2	191.7	186.7	183.8
70°	175.2	172.3	165.9	160.8	158.0
72.5°	147.9	145.0	141.5	136.4	134.3
75°	120.6	119.2	115.6	111.3	112.7
77.5°	96.2	93.3	91.9	89.8	87.6
80°	71.8	71.1	69.6	67.5	66.1
82.5°	48.8	48.8	48.1	45.2	45.2
85°	29.4	28.7	28.0	25.8	25.1
87.5°	12.9	11.5	10.1	7.9	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)