

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: P333823

Luminaire Tested: **S122DW-S865D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333823  
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-S865D840-4F0-1E-UDD-F  
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 865 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

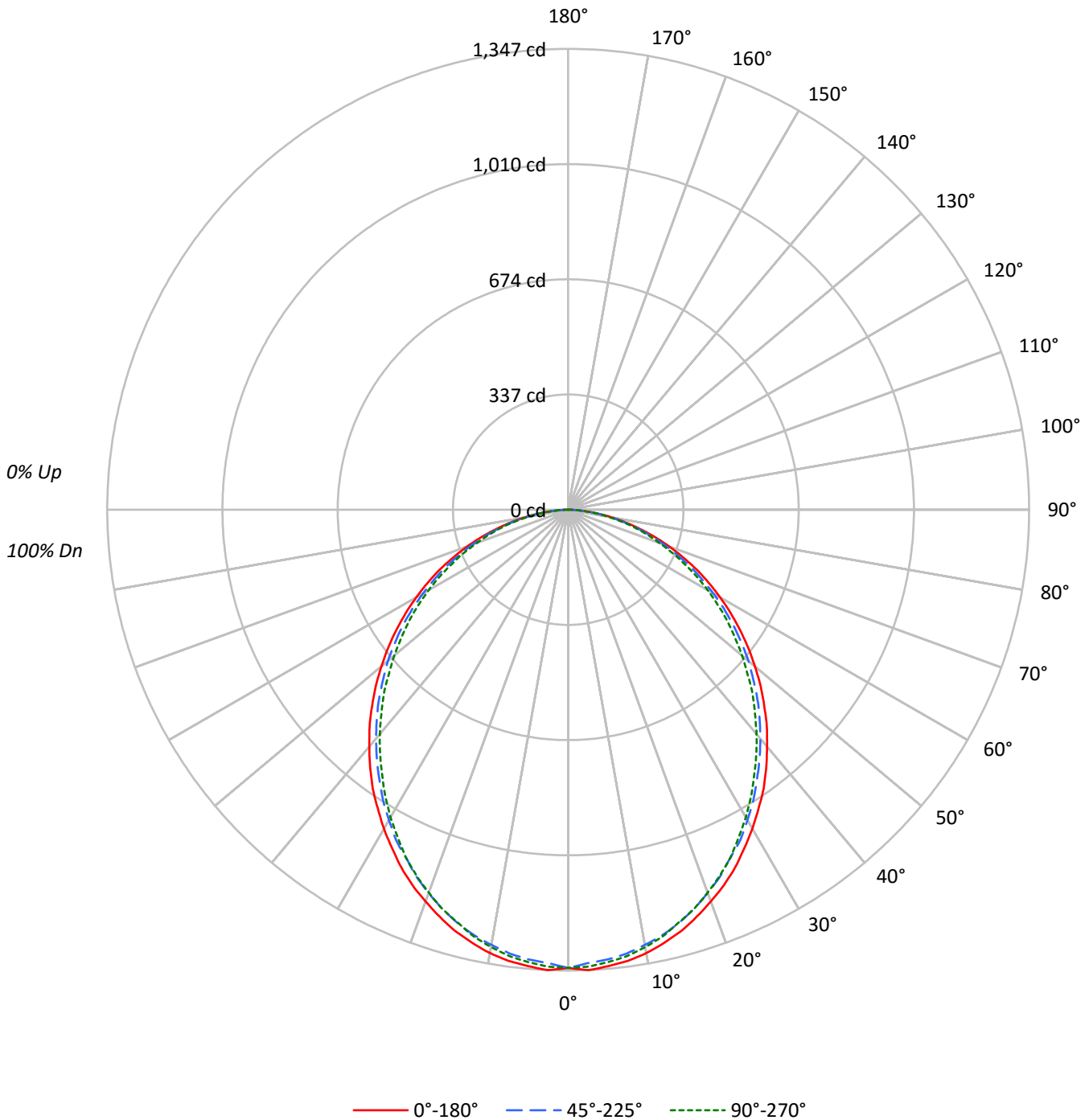
Lumens per Lamp: N/A  
Luminaire Lumens: 3407.5 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	21624	21624	21624
5°	21707	21394	21520
10°	21579	21177	21282
15°	21312	20903	20881
20°	20933	20490	20467
25°	20557	19983	19983
30°	20072	19520	19352
35°	19622	18961	18682
40°	19056	18402	18050
45°	18495	17849	17408
50°	17889	17274	16659
55°	17256	16603	15986
60°	16553	15804	15219
65°	15794	15007	14319
70°	14833	14044	13374
75°	13500	12932	12614
80°	11976	11613	11018
85°	9781	9300	8355



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.1	3.7
10°-20°	354.7	10.4
20°-30°	521.2	15.3
30°-40°	605.4	17.8
40°-50°	604.6	17.7
50°-60°	527.2	15.5
60°-70°	389.7	11.4
70°-80°	220.5	6.5
80°-90°	58.2	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°	1001.9	29.4
0°-40°	1607.3	47.2
0°-60°	2739.1	80.4
0°-90°	3407.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3407.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1339	1334	1320	1330	1328	127
15°	1275	1267	1250	1256	1249	359
25°	1154	1144	1122	1124	1122	531
35°	996	983	962	954	948	622
45°	810	801	782	768	762	625
55°	613	605	590	574	568	548
65°	413	406	393	381	375	409
75°	216	214	207	200	202	231
85°	53	52	50	46	45	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1339.3	1339.3	1339.3	1339.3	1339.3
2.5°	1347.1	1340.6	1326.5	1339.3	1336.8
5°	1339.3	1334.2	1320.0	1330.3	1327.8
7.5°	1330.3	1322.6	1308.4	1318.7	1316.2
10°	1316.2	1307.1	1291.7	1302.0	1298.1
12.5°	1296.8	1289.1	1273.7	1280.1	1277.5
15°	1275.0	1267.2	1250.5	1255.6	1249.2
17.5°	1247.9	1240.2	1223.4	1229.9	1223.4
20°	1218.3	1210.6	1192.5	1196.4	1191.2
22.5°	1188.7	1177.1	1160.3	1160.3	1157.8
25°	1153.9	1143.6	1121.7	1124.3	1121.7
27.5°	1115.3	1106.2	1089.5	1085.6	1079.2
30°	1076.6	1066.3	1047.0	1043.1	1038.0
32.5°	1035.4	1027.7	1007.1	999.4	994.2
35°	995.5	982.6	962.0	954.3	947.8
37.5°	950.4	938.8	918.2	909.2	902.8
40°	904.1	893.8	873.1	861.6	856.4
42.5°	859.0	848.7	828.1	815.2	807.5
45°	810.0	801.0	781.7	767.5	762.4
47.5°	762.4	753.4	732.8	718.6	710.9
50°	712.2	705.7	687.7	669.7	663.2
52.5°	663.2	654.2	637.5	623.3	614.3
55°	613.0	605.3	589.8	574.4	567.9
57.5°	562.8	556.3	539.6	524.1	519.0
60°	512.6	507.4	489.4	475.2	471.3
62.5°	463.6	454.6	441.7	428.8	423.7
65°	413.4	405.7	392.8	381.2	374.8
67.5°	361.9	355.4	343.9	334.8	329.7
70°	314.2	309.1	297.5	288.5	283.3
72.5°	265.3	260.1	253.7	244.7	240.8
75°	216.4	213.8	207.3	199.6	202.2
77.5°	172.6	167.4	164.8	161.0	157.1
80°	128.8	127.5	124.9	121.1	118.5
82.5°	87.6	87.6	86.3	81.1	81.1
85°	52.8	51.5	50.2	46.4	45.1
87.5°	23.2	20.6	18.0	14.2	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)