

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: P333819

Luminaire Tested: **S122DS-S1005D835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333819  
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: S122DS-S1005D835-4F0-1E-UDD-F  
Description: DEFINE 2 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1005 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3921.5 lumens  
Efficiency: N/A  
Efficacy: 95.4 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

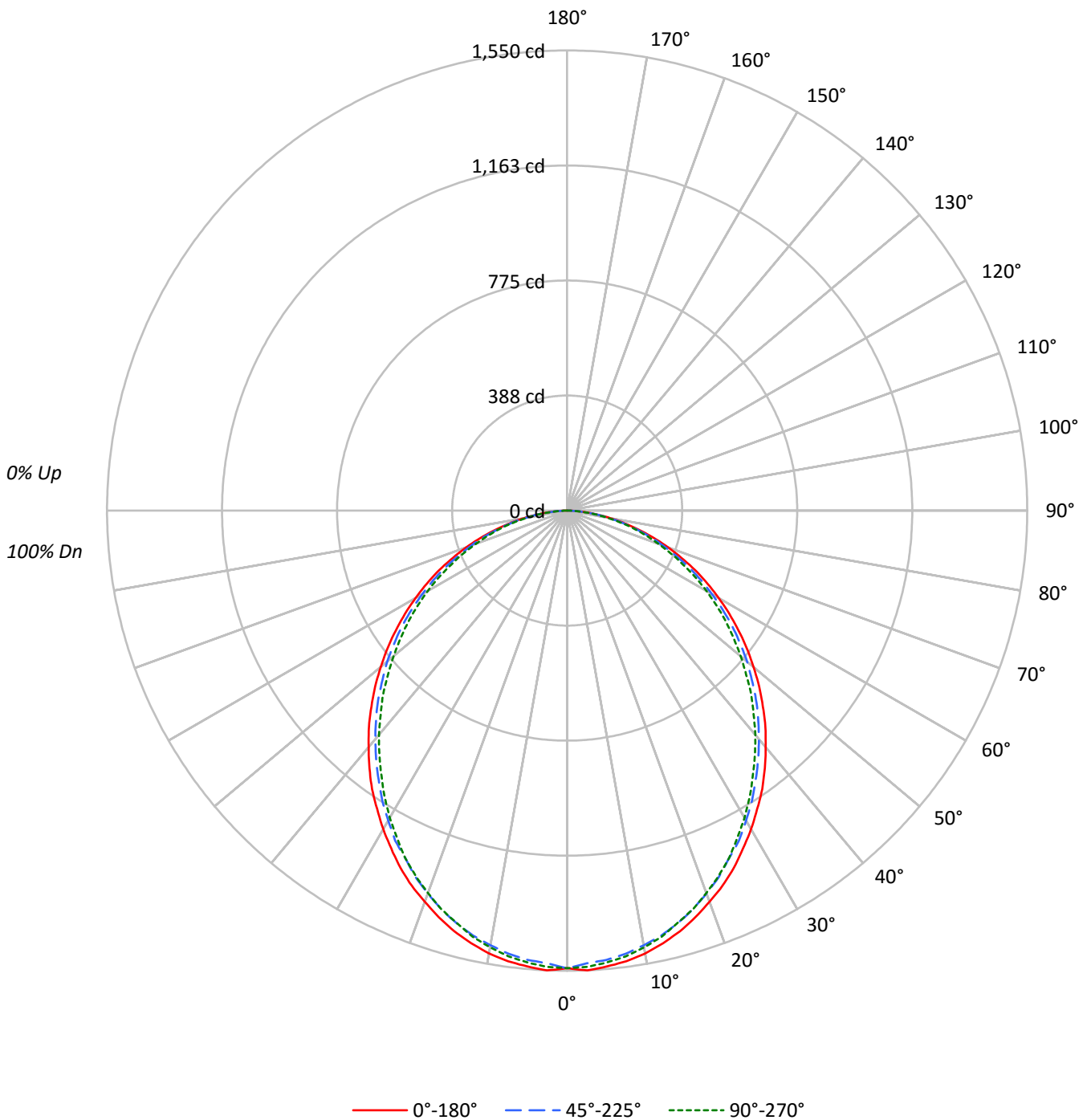
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	24887	24887	24887
5°	24982	24621	24765
10°	24833	24371	24492
15°	24527	24055	24030
20°	24089	23581	23555
25°	23656	22997	22997
30°	23099	22464	22272
35°	22580	21821	21500
40°	21928	21178	20773
45°	21286	20541	20034
50°	20587	19879	19173
55°	19859	19108	18398
60°	19049	18187	17515
65°	18174	17268	16478
70°	17070	16164	15394
75°	15533	14885	14516
80°	13780	13371	12682
85°	11263	10708	9615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.1	3.7
10°-20°	408.2	10.4
20°-30°	599.8	15.3
30°-40°	696.7	17.8
40°-50°	695.8	17.7
50°-60°	606.7	15.5
60°-70°	448.5	11.4
70°-80°	253.8	6.5
80°-90°	67.0	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°	1153.1	29.4
0°-40°	1849.7	47.2
0°-60°	3152.3	80.4
0°-90°	3921.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3921.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1541	1541	1541	1541	1541	
5°	1541	1535	1519	1531	1528	146
15°	1467	1458	1439	1445	1438	413
25°	1328	1316	1291	1294	1291	611
35°	1146	1131	1107	1098	1091	715
45°	932	922	900	883	877	719
55°	706	697	679	661	654	631
65°	476	467	452	439	431	470
75°	249	246	239	230	233	266
85°	61	59	58	53	52	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1541.4	1541.4	1541.4	1541.4	1541.4
2.5°	1550.3	1542.8	1526.5	1541.4	1538.4
5°	1541.4	1535.4	1519.1	1531.0	1528.0
7.5°	1531.0	1522.1	1505.8	1517.6	1514.7
10°	1514.7	1504.3	1486.5	1498.4	1493.9
12.5°	1492.5	1483.6	1465.8	1473.2	1470.2
15°	1467.3	1458.4	1439.1	1445.0	1437.6
17.5°	1436.1	1427.2	1408.0	1415.4	1408.0
20°	1402.0	1393.2	1372.4	1376.9	1370.9
22.5°	1368.0	1354.6	1335.4	1335.4	1332.4
25°	1327.9	1316.1	1290.9	1293.9	1290.9
27.5°	1283.5	1273.1	1253.8	1249.4	1242.0
30°	1239.0	1227.2	1204.9	1200.5	1194.6
32.5°	1191.6	1182.7	1159.0	1150.1	1144.2
35°	1145.6	1130.8	1107.1	1098.2	1090.8
37.5°	1093.8	1080.4	1056.7	1046.3	1038.9
40°	1040.4	1028.6	1004.8	991.5	985.6
42.5°	988.5	976.7	953.0	938.2	929.3
45°	932.2	921.9	899.6	883.3	877.4
47.5°	877.4	867.0	843.3	827.0	818.1
50°	819.6	812.2	791.4	770.7	763.3
52.5°	763.3	752.9	733.6	717.3	707.0
55°	705.5	696.6	678.8	661.0	653.6
57.5°	647.7	640.3	621.0	603.2	597.3
60°	589.9	583.9	563.2	546.9	542.4
62.5°	533.5	523.2	508.4	493.5	487.6
65°	475.7	466.9	452.0	438.7	431.3
67.5°	416.5	409.1	395.7	385.3	379.4
70°	361.6	355.7	342.4	332.0	326.1
72.5°	305.3	299.4	292.0	281.6	277.1
75°	249.0	246.0	238.6	229.7	232.7
77.5°	198.6	192.7	189.7	185.3	180.8
80°	148.2	146.7	143.8	139.3	136.4
82.5°	100.8	100.8	99.3	93.4	93.4
85°	60.8	59.3	57.8	53.4	51.9
87.5°	26.7	23.7	20.7	16.3	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)