

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: P242087

Luminaire Tested: **S121DR-S1025D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-S1025D830-X4F0-XX-UDD-F-W
Description: DEFINE 1 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3842.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

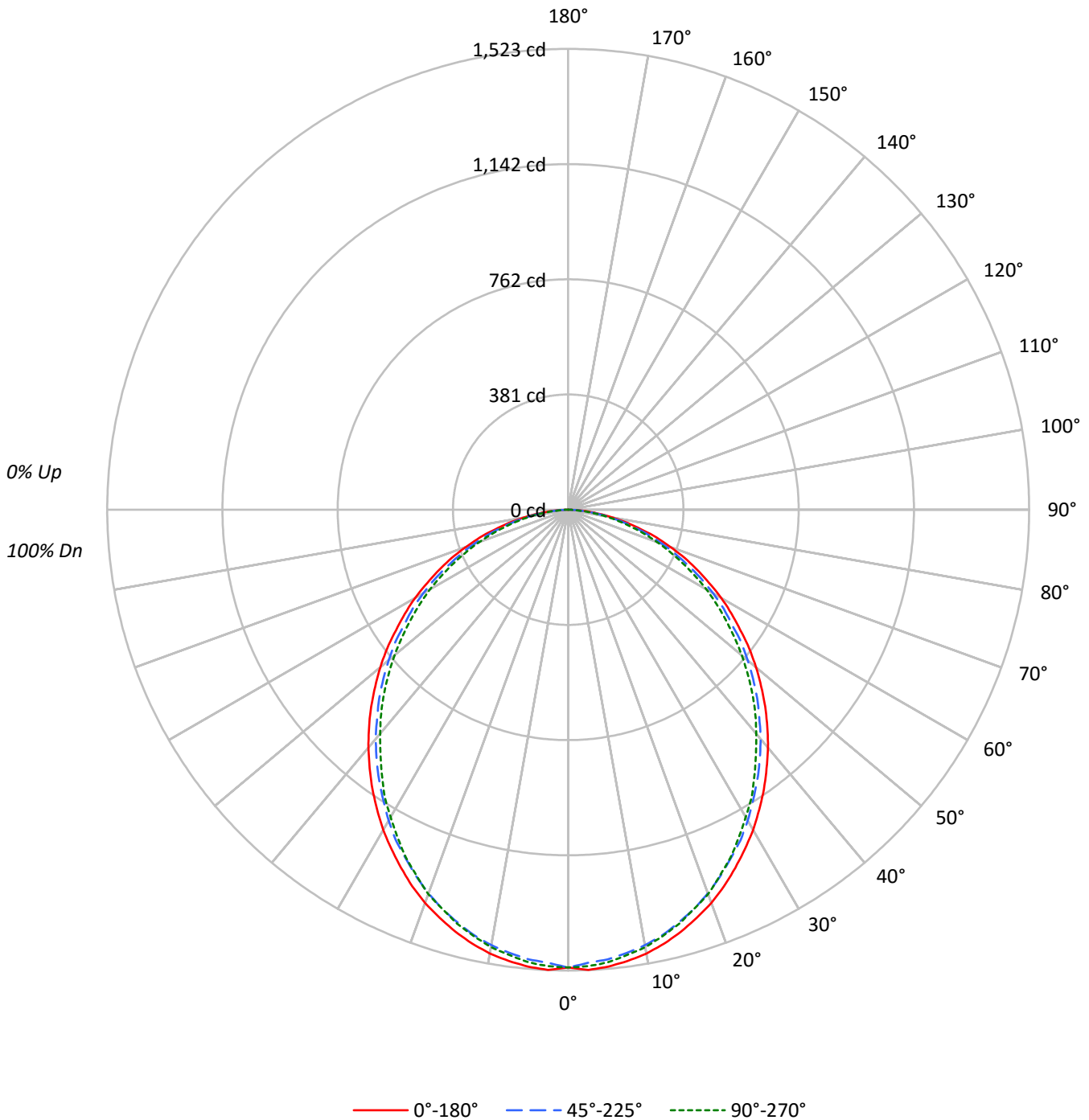
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44827	44827	44827
5°	45081	44373	44665
10°	44802	43963	44173
15°	44264	43322	43451
20°	43608	42548	42637
25°	42700	41559	41467
30°	41819	40577	40146
35°	40776	39412	38804
40°	39712	38253	37391
45°	38576	36996	36057
50°	37347	35673	34512
55°	35866	34058	32834
60°	34602	32782	31289
65°	32910	30750	29187
70°	30979	28684	27107
75°	28471	26067	24304
80°	25270	22882	21209
85°	20908	17100	15196



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	3.7
10°-20°	401.1	10.4
20°-30°	590.0	15.4
30°-40°	685.1	17.8
40°-50°	683.5	17.8
50°-60°	594.8	15.5
60°-70°	438.1	11.4
70°-80°	244.0	6.4
80°-90°	63.0	1.6
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°	1133.6	29.5
0°-40°	1818.7	47.3
0°-60°	3096.9	80.6
0°-90°	3842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1516	1509	1492	1504	1502	144
15°	1443	1432	1412	1422	1416	407
25°	1306	1292	1271	1274	1268	602
35°	1127	1113	1090	1078	1073	705
45°	921	905	883	866	860	710
55°	694	686	659	647	636	623
65°	469	460	439	425	416	466
75°	249	242	228	218	212	265
85°	62	59	50	48	45	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.9	1512.9	1512.9	1512.9	1512.9
2.5°	1522.6	1514.3	1498.9	1511.5	1510.1
5°	1515.7	1508.7	1491.9	1504.5	1501.7
7.5°	1504.5	1496.1	1477.9	1489.1	1484.9
10°	1489.1	1480.7	1461.2	1469.6	1468.2
12.5°	1468.2	1458.4	1440.2	1447.2	1443.0
15°	1443.0	1431.8	1412.3	1422.1	1416.5
17.5°	1413.7	1401.1	1383.0	1388.5	1383.0
20°	1383.0	1369.0	1349.4	1355.0	1352.2
22.5°	1346.6	1334.1	1311.7	1314.5	1308.9
25°	1306.1	1292.2	1271.2	1274.0	1268.4
27.5°	1264.2	1251.6	1232.1	1227.9	1220.9
30°	1222.3	1206.9	1186.0	1180.4	1173.4
32.5°	1174.8	1160.8	1137.1	1131.5	1127.3
35°	1127.3	1113.3	1089.6	1078.4	1072.8
37.5°	1077.0	1063.1	1039.3	1026.7	1018.4
40°	1026.7	1011.4	989.0	976.4	966.7
42.5°	973.7	959.7	934.5	922.0	915.0
45°	920.6	905.2	882.9	866.1	860.5
47.5°	864.7	850.7	828.4	810.2	804.6
50°	810.2	794.8	773.9	755.7	748.7
52.5°	754.3	740.4	720.8	702.7	691.5
55°	694.3	685.9	659.3	646.8	635.6
57.5°	639.8	630.0	609.1	588.1	581.1
60°	583.9	572.7	553.2	535.0	528.0
62.5°	525.2	516.9	497.3	480.5	470.8
65°	469.4	459.6	438.6	424.7	416.3
67.5°	417.7	405.1	384.2	370.2	363.2
70°	357.6	347.8	331.1	319.9	312.9
72.5°	305.9	294.8	279.4	268.2	261.2
75°	248.7	241.7	227.7	217.9	212.3
77.5°	198.4	188.6	178.8	171.8	167.6
80°	148.1	141.1	134.1	127.1	124.3
82.5°	103.4	97.8	90.8	86.6	82.4
85°	61.5	58.7	50.3	47.5	44.7
87.5°	29.3	25.1	16.8	15.4	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)