

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: P242362

Luminaire Tested: **S122RDR-S1005D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242362
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D830-X4F0-XX-UDD-F-W
Description: DEFINE 2 REGRESSED 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: 3174.6 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')
CIE Type: Direct

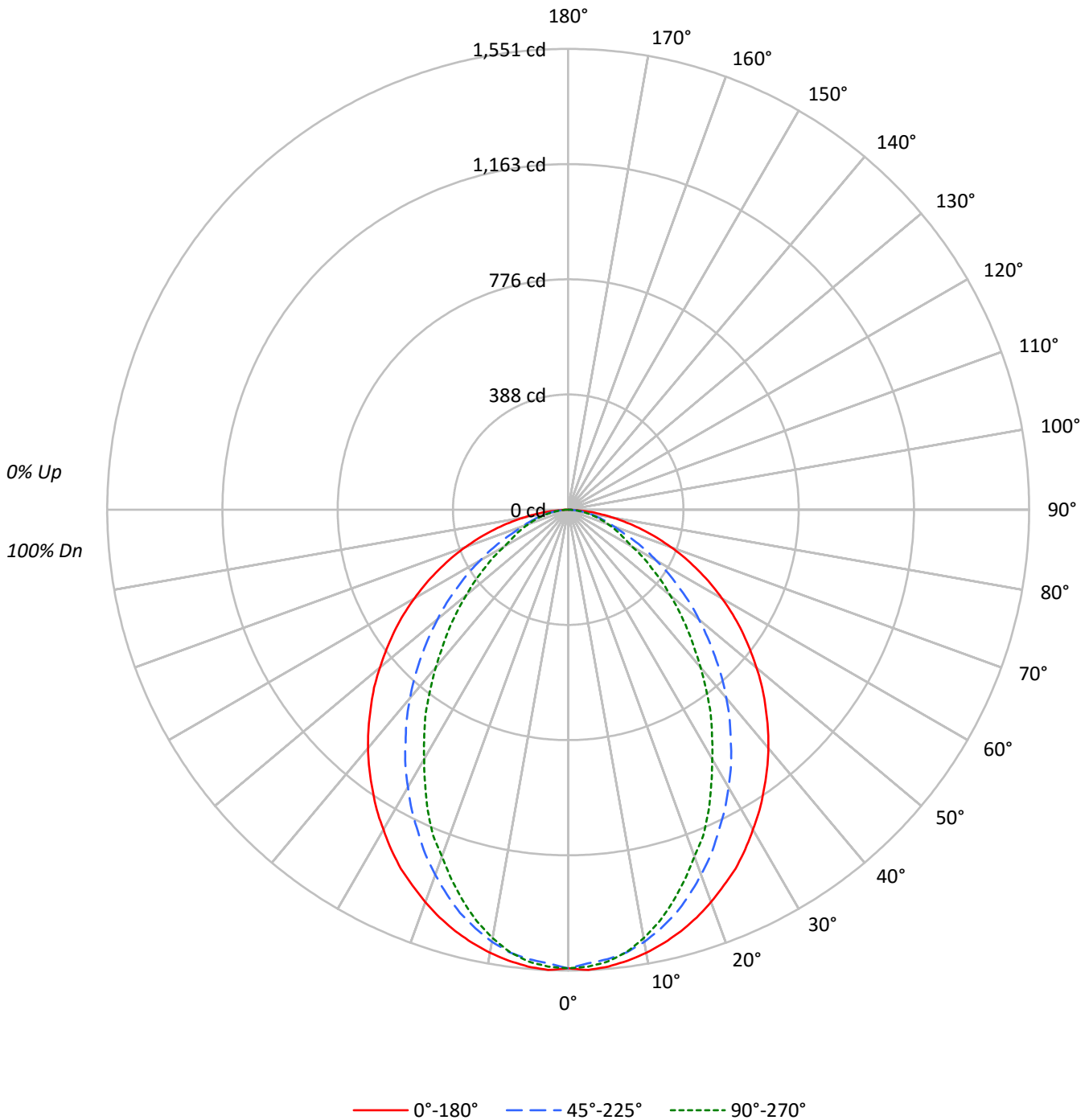
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29402	29402	29402
5°	29514	29034	29193
10°	29289	28558	28316
15°	28952	27712	26913
20°	28486	26503	25173
25°	28009	25132	23486
30°	27346	23719	21324
35°	26701	22186	19426
40°	26051	20598	17229
45°	25286	18816	15241
50°	24506	17012	13287
55°	23704	15077	11410
60°	22777	13036	9474
65°	21720	10957	8627
70°	20461	9022	7936
75°	18914	8228	7404
80°	16706	7360	6746
85°	13135	5792	5792



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	4.6
10°-20°	397.1	12.5
20°-30°	557.6	17.6
30°-40°	607.8	19.1
40°-50°	558.6	17.6
50°-60°	438.7	13.8
60°-70°	285.6	9.0
70°-80°	147.0	4.6
80°-90°	37.5	1.2
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°	1099.4	34.6
0°-40°	1707.2	53.8
0°-60°	2704.5	85.2
0°-90°	3174.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1544	1537	1518	1531	1527	146
15°	1468	1453	1405	1379	1365	414
25°	1333	1288	1196	1138	1118	613
35°	1148	1077	954	866	835	719
45°	939	845	698	599	566	725
55°	714	605	454	370	344	638
65°	482	369	243	196	191	478
75°	257	159	112	102	101	272
85°	60	31	26	26	26	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.6	1543.6	1543.6	1543.6	1543.6
2.5°	1550.6	1543.6	1528.2	1542.2	1539.4
5°	1543.6	1536.6	1518.5	1531.0	1526.8
7.5°	1531.0	1522.6	1503.1	1508.7	1501.7
10°	1514.3	1504.5	1476.5	1472.4	1464.0
12.5°	1493.3	1480.7	1443.0	1434.6	1419.3
15°	1468.2	1452.8	1405.3	1378.8	1364.8
17.5°	1438.8	1416.5	1357.8	1327.1	1304.7
20°	1405.3	1377.4	1307.5	1272.6	1241.9
22.5°	1369.0	1336.9	1255.8	1208.3	1187.4
25°	1332.7	1288.0	1195.8	1138.5	1117.5
27.5°	1289.4	1241.9	1139.9	1074.2	1042.1
30°	1243.3	1190.2	1078.4	1007.2	969.5
32.5°	1198.6	1134.3	1019.8	935.9	901.0
35°	1148.3	1077.0	954.1	866.1	835.4
37.5°	1099.4	1022.5	892.6	796.2	761.3
40°	1047.7	963.9	828.4	729.2	692.9
42.5°	994.6	905.2	764.1	660.7	625.8
45°	938.7	845.1	698.5	599.3	565.8
47.5°	885.6	786.5	635.6	536.4	505.7
50°	827.0	727.8	574.1	477.7	448.4
52.5°	769.7	664.9	515.5	423.3	396.7
55°	713.8	604.9	454.0	370.2	343.6
57.5°	656.6	544.8	399.5	321.3	298.9
60°	597.9	486.1	342.2	271.0	248.7
62.5°	540.6	428.9	293.4	226.3	215.1
65°	481.9	368.8	243.1	195.6	191.4
67.5°	426.1	312.9	195.6	171.8	167.6
70°	367.4	258.4	162.0	148.1	142.5
72.5°	311.5	208.1	135.5	124.3	121.5
75°	257.0	159.2	111.8	102.0	100.6
77.5°	202.6	113.2	88.0	82.4	79.6
80°	152.3	81.0	67.1	61.5	61.5
82.5°	106.2	54.5	46.1	43.3	43.3
85°	60.1	30.7	26.5	26.5	26.5
87.5°	22.4	11.2	11.2	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)