

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: P242361

Luminaire Tested: **S122RDR-S865D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242361
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-S865D830-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: 2731.6 lumens
Efficiency: N/A
Efficacy: 78.5 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

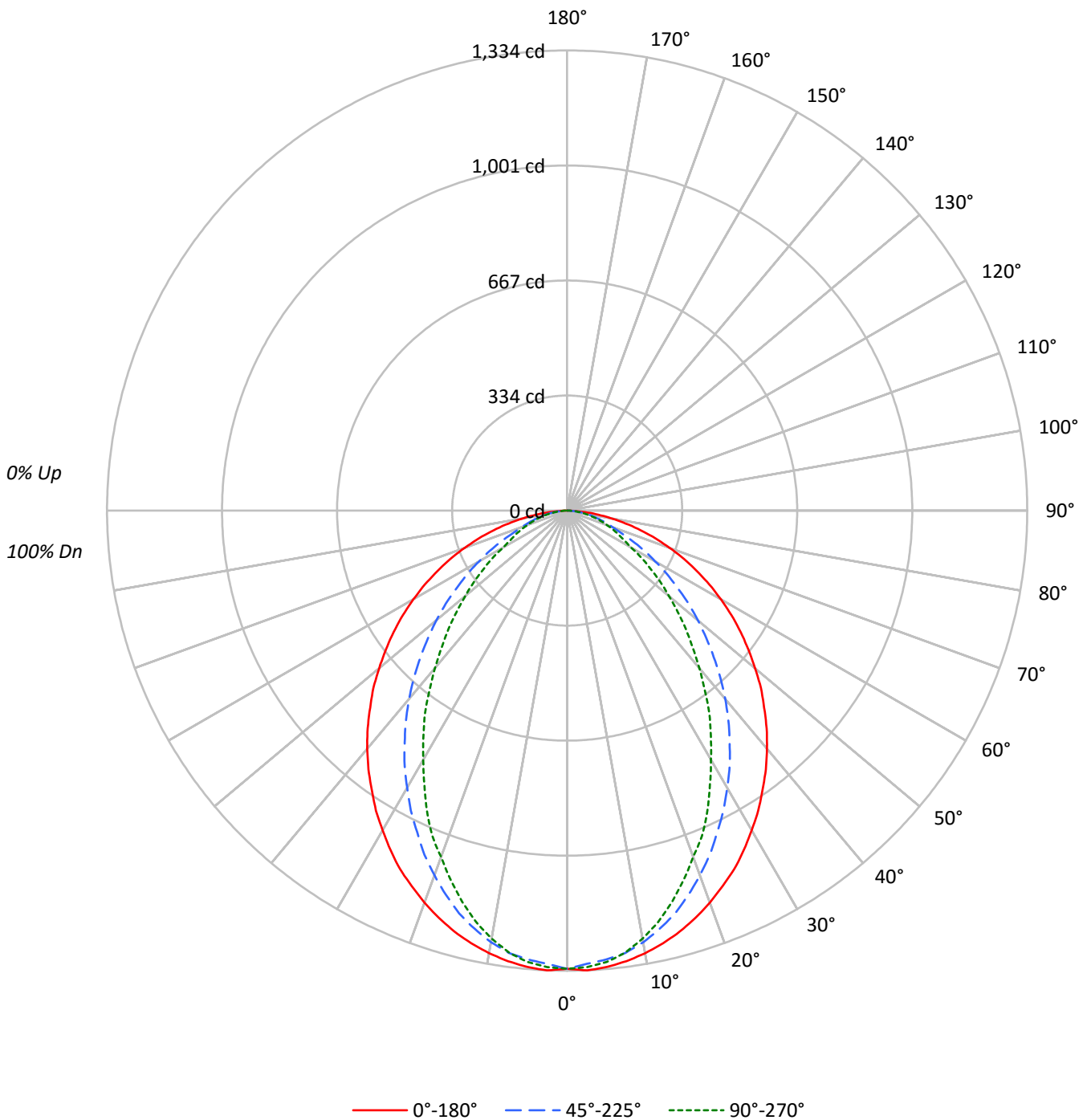
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	25299	25299	25299
5°	25396	24981	25120
10°	25200	24573	24365
15°	24912	23845	23157
20°	24511	22804	21661
25°	24100	21624	20210
30°	23530	20409	18348
35°	22974	19088	16714
40°	22416	17724	14825
45°	21757	16189	13113
50°	21087	14639	11432
55°	20397	12971	9820
60°	19596	11219	8152
65°	18691	9424	7423
70°	17604	7763	6828
75°	16279	7080	6366
80°	14370	6329	5803
85°	11299	4983	4983



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	4.6
10°-20°	341.7	12.5
20°-30°	479.8	17.6
30°-40°	523.0	19.1
40°-50°	480.7	17.6
50°-60°	377.5	13.8
60°-70°	245.7	9.0
70°-80°	126.5	4.6
80°-90°	32.3	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°	946.0	34.6
0°-40°	1468.9	53.8
0°-60°	2327.1	85.2
0°-90°	2731.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2731.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1328	1322	1306	1317	1314	126
15°	1263	1250	1209	1186	1174	356
25°	1147	1108	1029	980	962	527
35°	988	927	821	745	719	618
45°	808	727	601	516	487	624
55°	614	520	391	318	296	549
65°	415	317	209	168	165	411
75°	221	137	96	88	86	234
85°	52	26	23	23	23	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1328.2	1328.2	1328.2	1328.2	1328.2
2.5°	1334.2	1328.2	1315.0	1327.0	1324.6
5°	1328.2	1322.2	1306.5	1317.4	1313.8
7.5°	1317.4	1310.1	1293.3	1298.1	1292.1
10°	1302.9	1294.5	1270.5	1266.9	1259.7
12.5°	1284.9	1274.1	1241.6	1234.4	1221.2
15°	1263.3	1250.1	1209.2	1186.3	1174.3
17.5°	1238.0	1218.8	1168.3	1141.9	1122.6
20°	1209.2	1185.1	1125.0	1095.0	1068.6
22.5°	1177.9	1150.3	1080.6	1039.7	1021.7
25°	1146.7	1108.2	1028.9	979.6	961.6
27.5°	1109.4	1068.6	980.8	924.3	896.7
30°	1069.8	1024.1	927.9	866.6	834.2
32.5°	1031.3	976.0	877.4	805.3	775.3
35°	988.0	926.7	820.9	745.2	718.8
37.5°	946.0	879.8	768.1	685.1	655.1
40°	901.5	829.4	712.8	627.4	596.2
42.5°	855.8	778.9	657.5	568.5	538.5
45°	807.7	727.2	601.0	515.6	486.8
47.5°	762.0	676.7	546.9	461.6	435.1
50°	711.6	626.2	494.0	411.1	385.8
52.5°	662.3	572.1	443.5	364.2	341.4
55°	614.2	520.5	390.6	318.5	295.7
57.5°	564.9	468.8	343.8	276.5	257.2
60°	514.4	418.3	294.5	233.2	214.0
62.5°	465.2	369.0	252.4	194.7	185.1
65°	414.7	317.3	209.1	168.3	164.7
67.5°	366.6	269.2	168.3	147.8	144.2
70°	316.1	222.4	139.4	127.4	122.6
72.5°	268.0	179.1	116.6	107.0	104.6
75°	221.2	137.0	96.2	87.7	86.5
77.5°	174.3	97.4	75.7	70.9	68.5
80°	131.0	69.7	57.7	52.9	52.9
82.5°	91.3	46.9	39.7	37.3	37.3
85°	51.7	26.4	22.8	22.8	22.8
87.5°	19.2	9.6	9.6	8.4	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)