

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: STREETWORKS

Report Number: P398159

Luminaire Tested: **ARCH-S-PA1-90-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-827-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5851 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

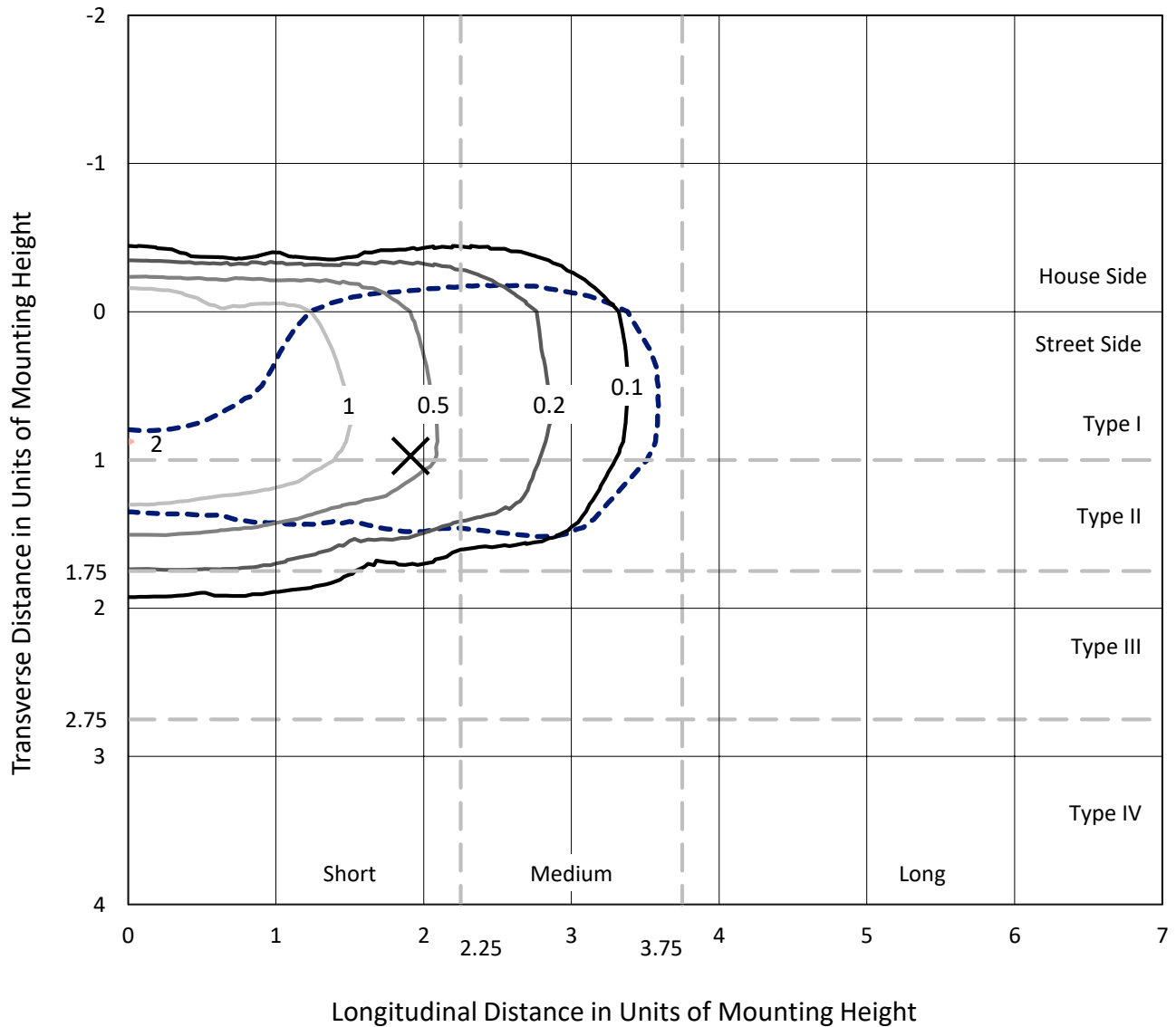
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398159
 CATALOG NUMBER: ARCH-S-PA1-90-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

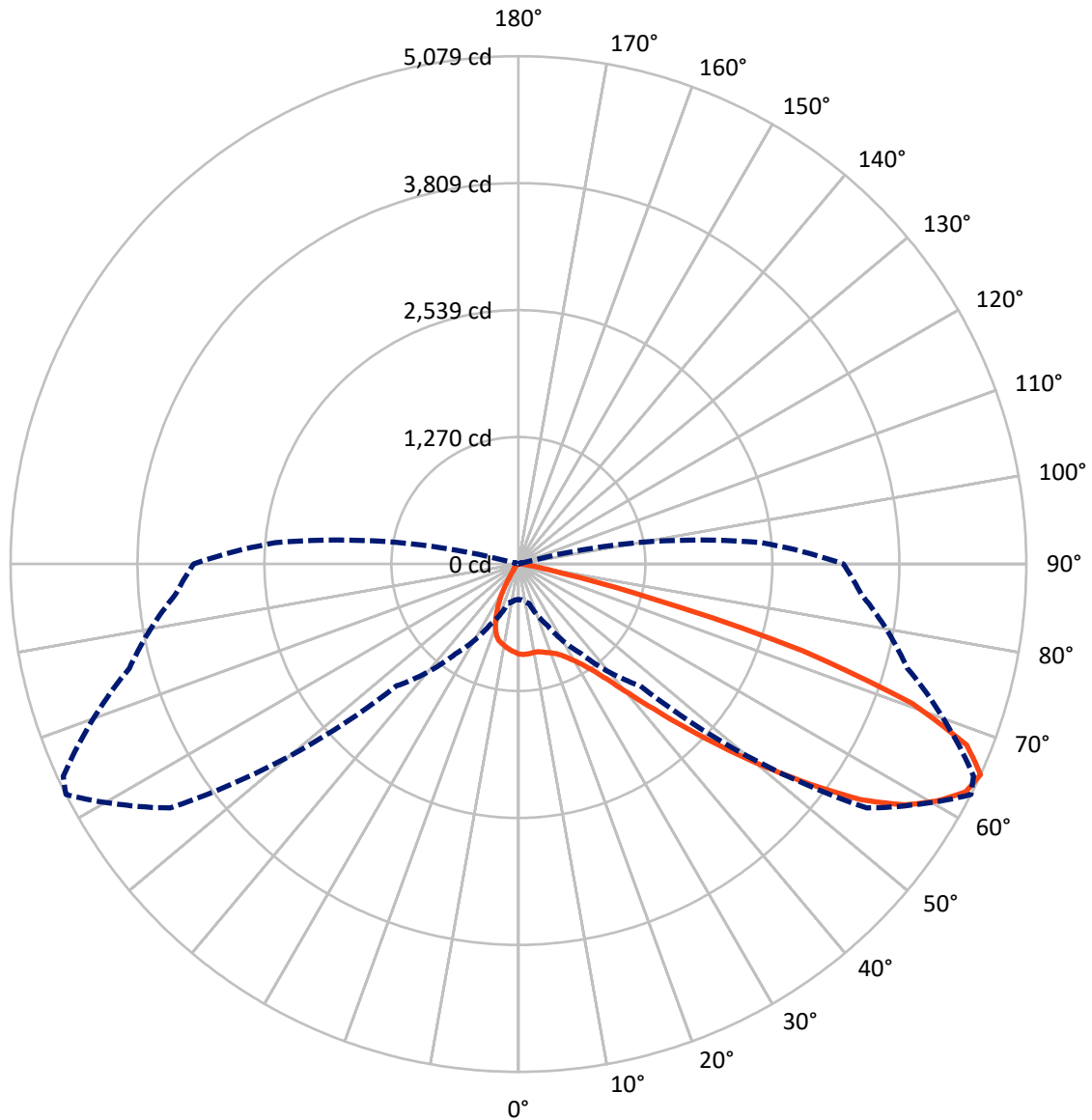
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P398159
CATALOG NUMBER: ARCH-S-PA1-90-827-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P398159

CATALOG NUMBER: ARCH-S-PA1-90-827-U-T2U-HSS

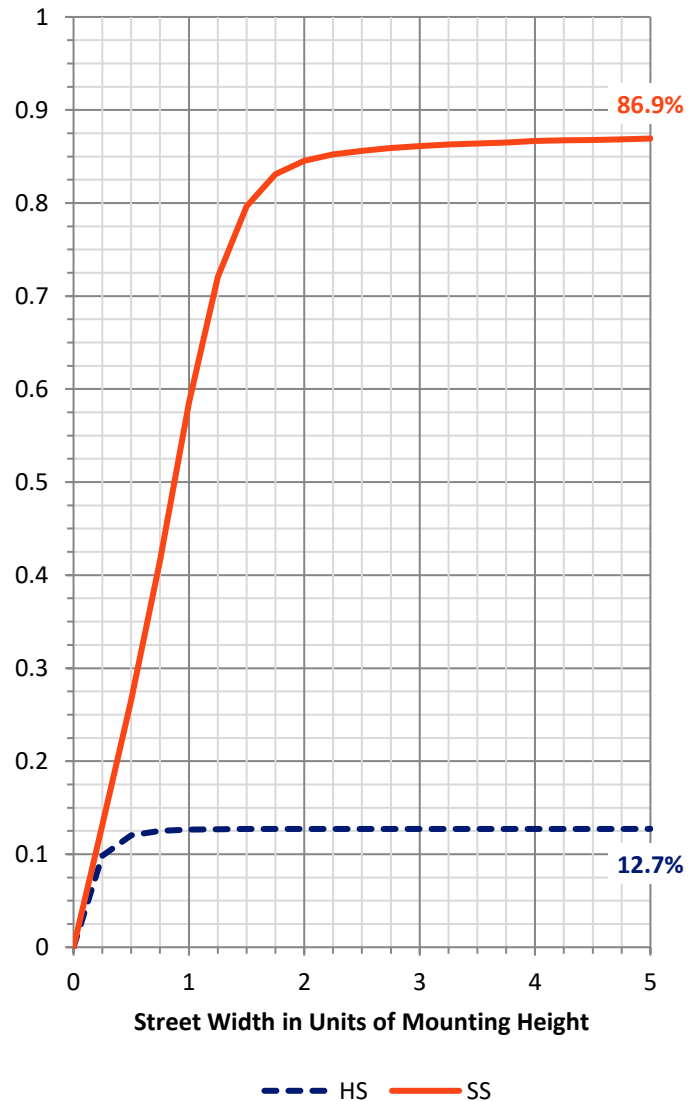
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	753.0	0.0	753.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5098.0	0.0	5098.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	5851.0	0.0	5851.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.3	1.4
10°-20°	202.9	3.5
20°-30°	300.7	5.1
30°-40°	558.4	9.5
40°-50°	1182.9	20.2
50°-60°	1635.6	28.0
60°-70°	1309.4	22.4
70°-80°	544.0	9.3
80°-90°	34.9	0.6
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°-90°	5851.0	100.0
0°-180°	5851.0	100.0



REPORT NUMBER: P398159

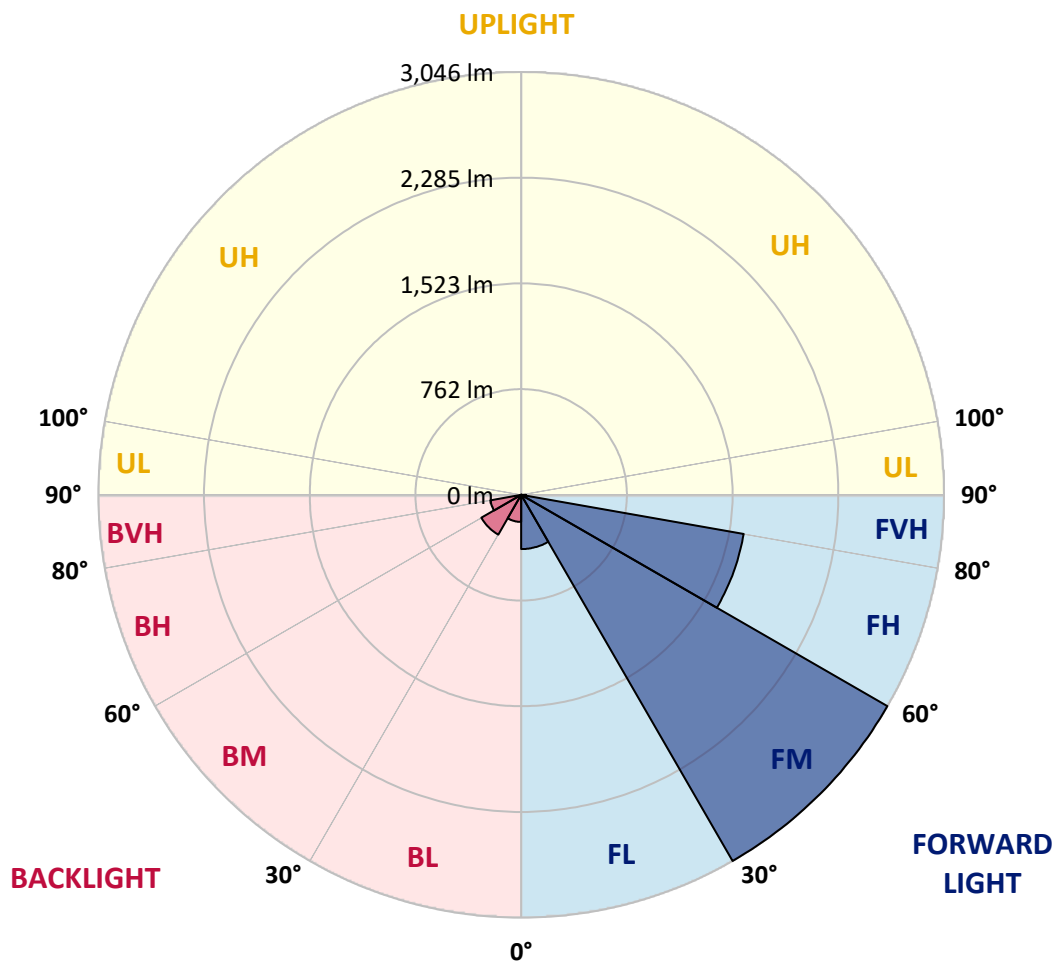
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	390.7	6.7			
FM	(30°-60°)	3046.1	52.1			
FH	(60°-80°)	1627.9	27.8			G1/1800
FVH	(80°-90°)	33.3	0.6			G1/100
BL	(0°-30°)	195.2	3.3	B1/500		
BM	(30°-60°)	330.8	5.7	B1/1000		
BH	(60°-80°)	225.5	3.9	B1/500		G1/500
BVH	(80°-90°)	1.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P398159

CATALOG NUMBER: ARCH-S-PA1-90-827-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3
2.5°	916.8	914.6	912.4	911.3	911.3	910.2	905.8	904.7	902.5	900.2	898.0
5°	908.0	904.7	903.6	904.7	905.8	908.0	905.8	905.8	903.6	901.3	896.9
7.5°	885.9	883.7	884.8	888.1	889.2	896.9	898.0	901.3	901.3	899.1	895.8
10°	859.4	858.3	858.3	863.8	869.3	880.4	888.1	896.9	898.0	898.0	892.5
12.5°	839.5	838.4	841.7	848.3	859.4	873.7	887.0	900.2	902.5	903.6	894.7
15°	827.3	827.3	831.8	845.0	860.5	880.4	895.8	913.5	915.7	914.6	902.5
17.5°	816.3	817.4	826.2	848.3	866.0	892.5	911.3	931.2	932.3	931.2	911.3
20°	811.9	814.1	827.3	856.1	875.9	905.8	930.1	950.0	951.1	946.6	920.1
22.5°	824.0	825.1	841.7	872.6	891.4	924.5	955.5	974.3	975.4	968.7	933.4
25°	866.0	866.0	880.4	906.9	923.4	956.6	989.7	1011.8	1011.8	1004.1	963.2
27.5°	964.3	955.5	952.2	959.9	965.4	1000.8	1036.1	1063.7	1062.6	1051.6	1001.9
30°	1154.3	1132.2	1096.9	1057.1	1037.2	1061.5	1094.7	1130.0	1128.9	1111.2	1049.4
32.5°	1473.5	1441.5	1357.5	1252.6	1167.6	1139.9	1170.9	1209.5	1210.6	1189.6	1125.6
35°	1920.9	1870.1	1719.9	1574.0	1379.6	1274.7	1283.5	1325.5	1338.8	1327.7	1253.7
37.5°	2351.7	2305.3	2161.7	1959.6	1695.6	1481.3	1443.7	1480.2	1495.6	1495.6	1417.2
40°	2785.8	2731.7	2604.6	2401.4	2123.0	1803.8	1669.0	1698.9	1715.4	1718.8	1616.0
42.5°	3133.7	3098.4	3001.2	2843.2	2582.5	2369.4	1993.8	1977.2	1992.7	1980.5	1846.9
45°	3374.5	3346.9	3279.5	3219.9	3092.9	2985.7	2427.9	2316.3	2326.3	2284.3	2106.5
47.5°	3424.2	3393.3	3379.0	3461.8	3552.4	3578.9	2961.4	2719.5	2709.6	2616.8	2376.0
50°	3207.7	3211.1	3264.1	3500.5	3878.2	4116.8	3580.0	3174.6	3138.2	2931.6	2626.7
52.5°	2740.5	2793.5	2927.2	3310.5	3977.6	4507.9	4198.6	3657.3	3601.0	3237.6	2814.5
55°	2144.0	2212.5	2432.3	2873.1	3770.0	4682.4	4719.9	4158.8	4030.7	3467.3	2960.3
57.5°	1593.9	1614.9	1871.2	2273.3	3278.4	4511.2	4987.2	4545.4	4380.8	3650.7	3105.0
60°	993.0	1006.3	1276.9	1730.9	2483.1	3878.2	4987.2	4811.6	4654.8	3815.3	3237.6
62.5°	617.5	621.9	723.5	1186.3	1687.8	2876.4	4780.7	5018.2	4892.3	3933.5	3351.3
65°	355.7	360.1	407.6	670.5	1098.0	1722.1	4252.7	5078.9	5022.6	4027.4	3439.7
67.5°	259.6	261.8	280.6	376.7	718.0	884.8	3194.5	4834.8	4905.5	4073.7	3437.5
70°	225.3	228.7	253.0	293.8	518.1	543.5	1626.0	4175.4	4373.1	4007.5	3334.8
72.5°	173.4	177.8	214.3	276.1	380.0	391.0	588.7	2971.4	3270.7	3593.2	3053.1
75°	119.3	123.7	160.2	227.5	313.7	292.7	323.6	1367.5	1725.4	2410.2	2324.1
77.5°	76.2	77.3	100.5	165.7	270.6	207.7	222.0	446.3	626.3	1090.2	1096.9
80°	50.8	51.9	61.9	107.1	185.6	192.2	137.0	206.6	226.4	318.1	220.9
82.5°	30.9	30.9	42.0	67.4	112.7	159.1	89.5	108.3	116.0	122.6	57.4
85°	12.2	12.2	25.4	44.2	70.7	74.0	56.3	63.0	66.3	71.8	26.5
87.5°	3.3	3.3	14.4	24.3	30.9	34.2	34.2	30.9	33.1	40.9	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P398159

CATALOG NUMBER: ARCH-S-PA1-90-827-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3	901.3
2.5°	896.9	893.6	889.2	884.8	880.4	877.0	873.7	873.7	871.5	868.2	866.0
5°	894.7	889.2	879.3	871.5	859.4	850.5	843.9	838.4	835.1	827.3	826.2
7.5°	891.4	884.8	870.4	855.0	835.1	819.6	804.1	793.1	782.1	773.2	771.0
10°	885.9	878.2	857.2	835.1	807.5	778.7	742.3	700.3	661.7	639.6	632.9
12.5°	885.9	875.9	848.3	818.5	778.7	708.0	615.3	522.5	450.7	418.6	409.8
15°	891.4	878.2	841.7	800.8	726.8	583.2	433.0	310.4	232.0	207.7	202.1
17.5°	896.9	878.2	831.8	776.5	631.8	423.1	246.3	163.5	138.1	132.6	132.6
20°	899.1	875.9	818.5	731.2	504.8	262.9	146.9	122.6	112.7	109.4	109.4
22.5°	908.0	877.0	808.6	666.1	366.7	154.6	116.0	102.7	92.8	89.5	89.5
25°	930.1	890.3	810.8	583.2	235.3	117.1	98.3	85.1	75.1	70.7	70.7
27.5°	965.4	920.1	822.9	487.1	148.0	100.5	82.8	68.5	60.8	56.3	56.3
30°	1005.2	953.3	828.4	376.7	110.5	85.1	67.4	54.1	48.6	45.3	44.2
32.5°	1074.8	1010.7	824.0	258.5	90.6	71.8	54.1	43.1	38.7	37.6	37.6
35°	1186.3	1111.2	815.2	162.4	75.1	57.4	43.1	35.3	32.0	30.9	29.8
37.5°	1337.7	1258.1	788.7	107.1	61.9	45.3	35.3	29.8	26.5	25.4	25.4
40°	1522.1	1426.0	737.9	81.7	53.0	36.5	29.8	25.4	23.2	22.1	22.1
42.5°	1733.1	1612.7	657.2	70.7	44.2	30.9	25.4	21.0	19.9	18.8	18.8
45°	1964.0	1808.2	545.7	63.0	37.6	25.4	21.0	18.8	16.6	16.6	15.5
47.5°	2209.2	2004.8	419.7	55.2	32.0	22.1	18.8	15.5	14.4	13.3	13.3
50°	2445.6	2180.5	294.9	47.5	26.5	18.8	15.5	13.3	12.2	11.0	11.0
52.5°	2612.4	2286.5	208.8	40.9	22.1	16.6	12.2	9.9	8.8	8.8	8.8
55°	2746.0	2352.8	145.8	34.2	18.8	14.4	9.9	7.7	7.7	6.6	6.6
57.5°	2871.9	2395.9	107.1	28.7	15.5	11.0	7.7	5.5	5.5	4.4	4.4
60°	3002.3	2419.1	81.7	23.2	13.3	8.8	5.5	4.4	3.3	3.3	3.3
62.5°	3133.7	2433.4	63.0	18.8	11.0	6.6	4.4	3.3	2.2	1.1	1.1
65°	3248.6	2437.8	48.6	14.4	8.8	4.4	3.3	1.1	0.0	0.0	0.0
67.5°	3282.9	2387.0	37.6	11.0	6.6	3.3	2.2	0.0	0.0	0.0	0.0
70°	3190.1	2252.3	28.7	8.8	5.5	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2831.1	1888.9	22.1	5.5	4.4	2.2	1.1	0.0	0.0	0.0	0.0
75°	2025.8	1007.4	15.5	4.4	3.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	932.3	389.9	11.0	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
80°	182.3	97.2	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.0	16.6	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.4	5.5	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)