

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: P398168

Luminaire Tested: **ARCH-S-PA1-90-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398168
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-PA1-90-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 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: 6325 lumens
Efficiency: N/A
Efficacy: 67.3 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

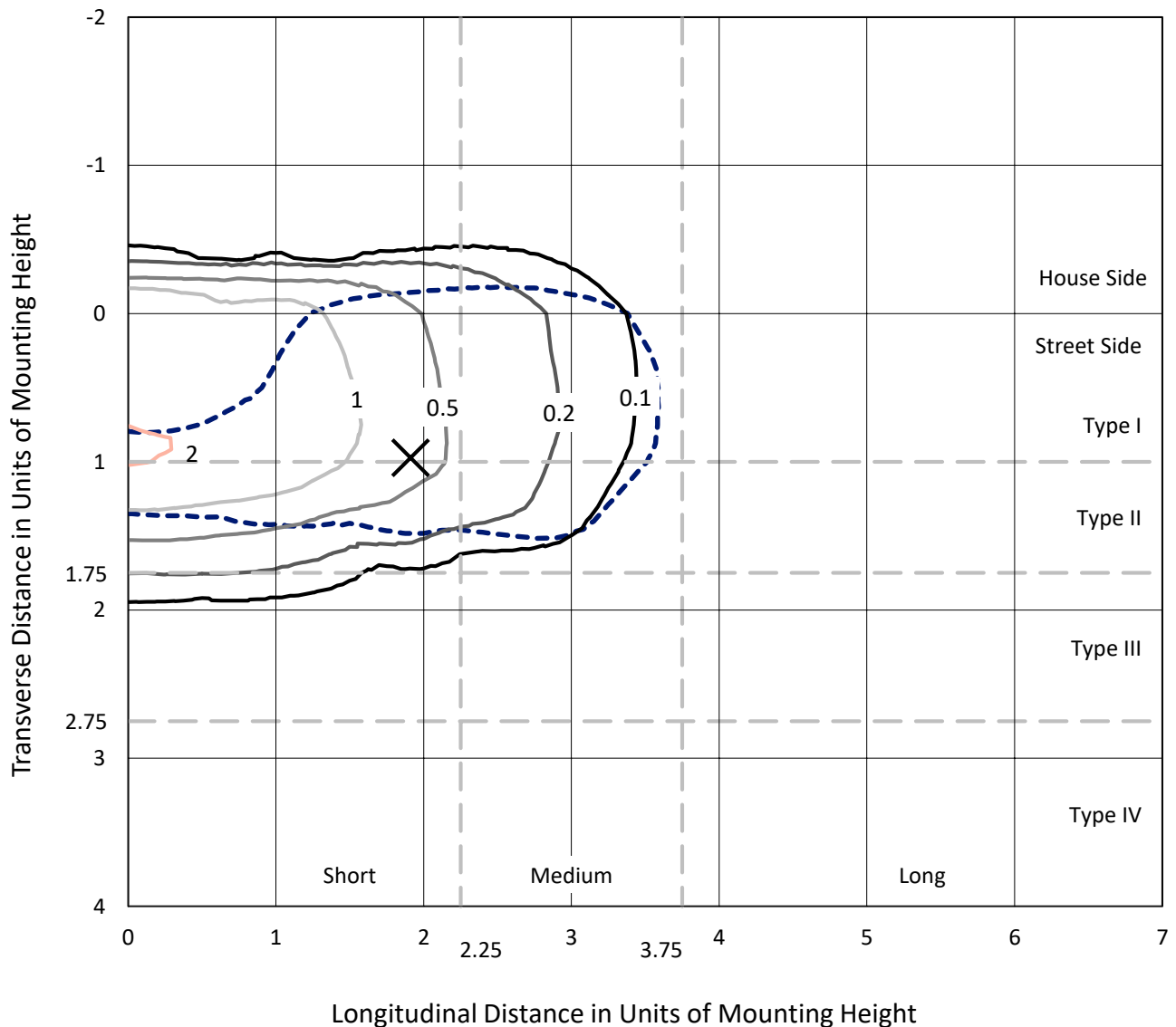
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

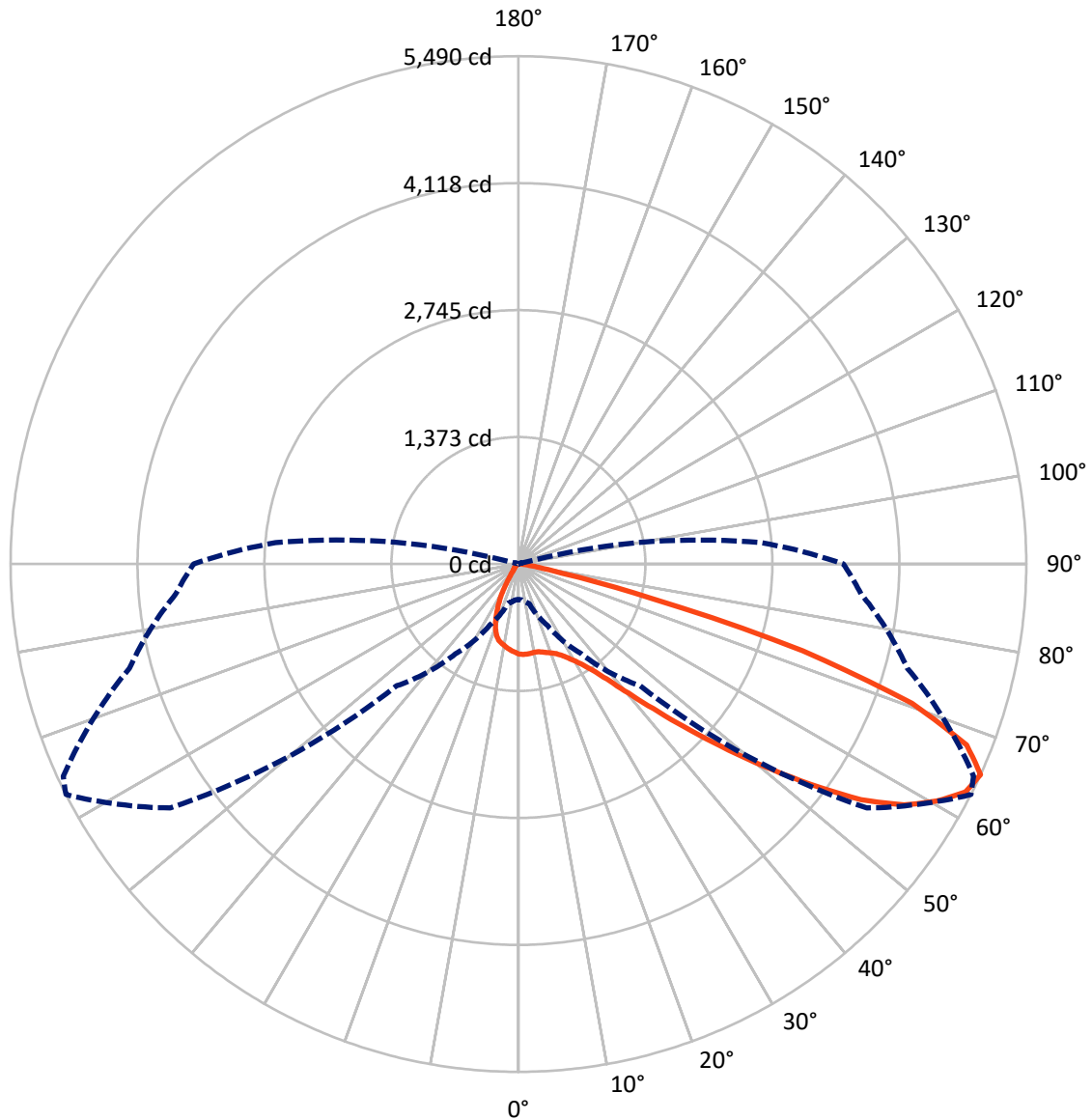
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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



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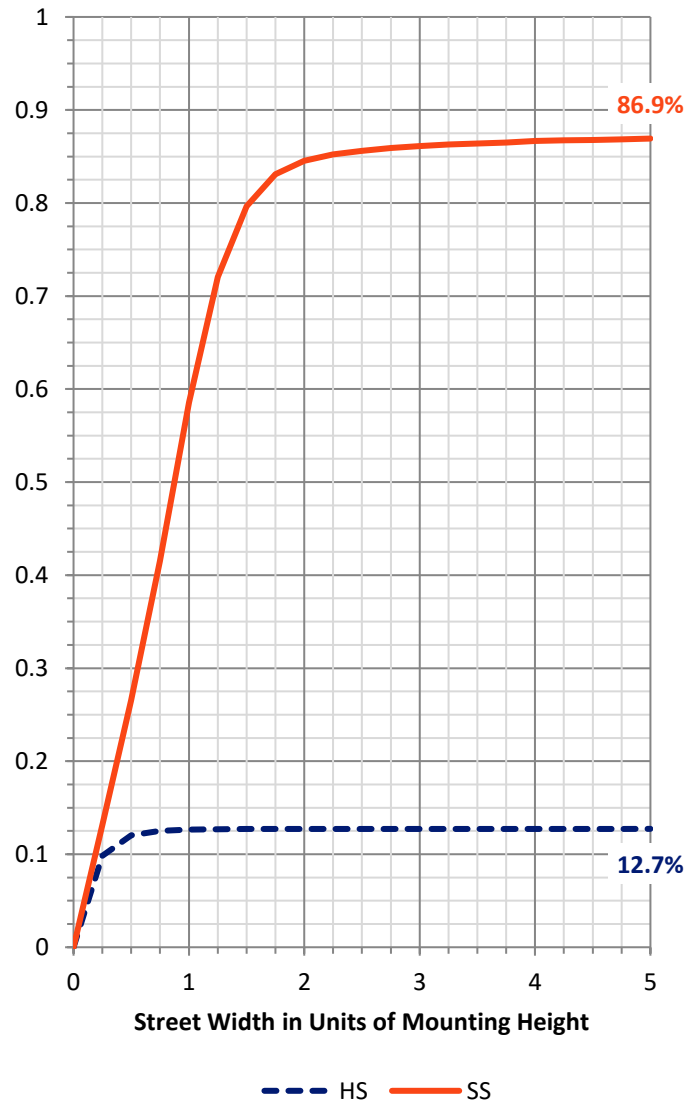
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	814.0	0.0	814.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5511.0	0.0	5511.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	6325.0	0.0	6325.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	1.4
10°-20°	219.3	3.5
20°-30°	325.1	5.1
30°-40°	603.6	9.5
40°-50°	1278.7	20.2
50°-60°	1768.1	28.0
60°-70°	1415.4	22.4
70°-80°	588.1	9.3
80°-90°	37.8	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°	6325.0	100.0
0°-180°	6325.0	100.0

Coefficient of Utilization



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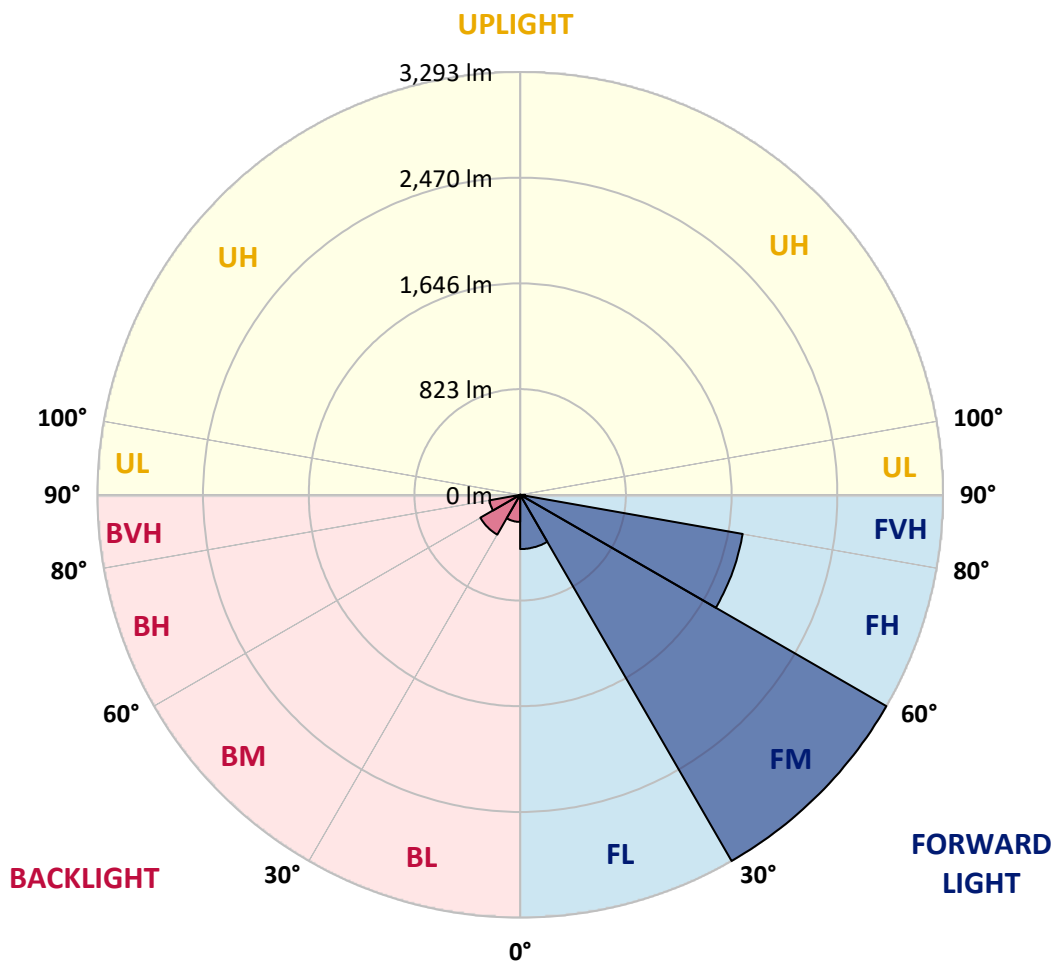
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	422.4	6.7			
FM (30°-60°)	3292.8	52.1			
FH (60°-80°)	1759.8	27.8			G1/1800
FVH (80°-90°)	36.0	0.6			G1/100
BL (0°-30°)	211.0	3.3	B1/500		
BM (30°-60°)	357.6	5.7	B1/1000		
BH (60°-80°)	243.7	3.9	B1/500		G1/500
BVH (80°-90°)	1.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4
2.5°	991.1	988.7	986.3	985.1	985.1	983.9	979.1	978.0	975.6	973.2	970.8
5°	981.5	978.0	976.8	978.0	979.1	981.5	979.1	979.1	976.8	974.4	969.6
7.5°	957.7	955.3	956.5	960.0	961.2	969.6	970.8	974.4	974.4	972.0	968.4
10°	929.0	927.8	927.8	933.8	939.7	951.7	960.0	969.6	970.8	970.8	964.8
12.5°	907.5	906.3	909.9	917.1	929.0	944.5	958.8	973.2	975.6	976.8	967.2
15°	894.4	894.4	899.1	913.5	930.2	951.7	968.4	987.5	989.9	988.7	975.6
17.5°	882.4	883.6	893.2	917.1	936.2	964.8	985.1	1006.6	1007.8	1006.6	985.1
20°	877.6	880.0	894.4	925.4	946.9	979.1	1005.4	1026.9	1028.1	1023.3	994.7
22.5°	890.8	892.0	909.9	943.3	963.6	999.4	1032.9	1053.2	1054.4	1047.2	1009.0
25°	936.2	936.2	951.7	980.3	998.3	1034.1	1069.9	1093.8	1093.8	1085.4	1041.2
27.5°	1042.4	1032.9	1029.3	1037.7	1043.6	1081.8	1120.0	1149.9	1148.7	1136.8	1083.0
30°	1247.8	1223.9	1185.7	1142.7	1121.2	1147.5	1183.3	1221.5	1220.4	1201.2	1134.4
32.5°	1592.9	1558.3	1467.5	1354.1	1262.1	1232.3	1265.7	1307.5	1308.7	1286.0	1216.8
35°	2076.5	2021.6	1859.2	1701.6	1491.4	1378.0	1387.5	1432.9	1447.2	1435.3	1355.3
37.5°	2542.2	2492.0	2336.8	2118.3	1832.9	1601.3	1560.7	1600.1	1616.8	1616.8	1532.0
40°	3011.5	2953.0	2815.6	2595.9	2295.0	1949.9	1804.3	1836.5	1854.4	1858.0	1746.9
42.5°	3387.6	3349.4	3244.3	3073.6	2791.8	2561.3	2155.3	2137.4	2154.1	2141.0	1996.5
45°	3647.9	3618.1	3545.2	3480.7	3343.4	3227.6	2624.6	2504.0	2514.7	2469.4	2277.1
47.5°	3701.6	3668.2	3652.7	3742.2	3840.2	3868.8	3201.3	2939.8	2929.1	2828.8	2568.5
50°	3467.6	3471.2	3528.5	3784.0	4192.4	4450.3	3870.0	3431.8	3392.4	3169.1	2839.5
52.5°	2962.5	3019.8	3164.3	3578.7	4299.9	4873.0	4538.7	3953.6	3892.7	3499.8	3042.5
55°	2317.7	2391.7	2629.4	3105.8	4075.4	5061.7	5102.3	4495.7	4357.2	3748.2	3200.1
57.5°	1723.1	1745.7	2022.8	2457.4	3544.0	4876.6	5391.3	4913.6	4735.7	3946.4	3356.6
60°	1073.5	1087.8	1380.4	1871.1	2684.3	4192.4	5391.3	5201.4	5031.9	4124.4	3499.8
62.5°	667.5	672.3	782.1	1282.4	1824.6	3109.4	5168.0	5424.7	5288.6	4252.1	3622.8
65°	384.5	389.3	440.6	724.8	1186.9	1861.6	4597.2	5490.4	5429.5	4353.6	3718.4
67.5°	280.6	283.0	303.3	407.2	776.2	956.5	3453.3	5226.5	5302.9	4403.8	3716.0
70°	243.6	247.2	273.4	317.6	560.0	587.5	1757.7	4513.6	4727.4	4332.1	3604.9
72.5°	187.5	192.2	231.7	298.5	410.8	422.7	636.4	3212.1	3535.7	3884.3	3300.4
75°	129.0	133.7	173.1	246.0	339.1	316.4	349.9	1478.3	1865.2	2605.5	2512.3
77.5°	82.4	83.6	108.7	179.1	292.5	224.5	240.0	482.4	677.0	1178.6	1185.7
80°	54.9	56.1	66.9	115.8	200.6	207.8	148.1	223.3	244.8	343.9	238.8
82.5°	33.4	33.4	45.4	72.8	121.8	171.9	96.7	117.0	125.4	132.5	62.1
85°	13.1	13.1	27.5	47.8	76.4	80.0	60.9	68.1	71.6	77.6	28.7
87.5°	3.6	3.6	15.5	26.3	33.4	37.0	37.0	33.4	35.8	44.2	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4	974.4
2.5°	969.6	966.0	961.2	956.5	951.7	948.1	944.5	944.5	942.1	938.5	936.2
5°	967.2	961.2	950.5	942.1	929.0	919.4	912.3	906.3	902.7	894.4	893.2
7.5°	963.6	956.5	940.9	924.2	902.7	886.0	869.3	857.3	845.4	835.9	833.5
10°	957.7	949.3	926.6	902.7	872.9	841.8	802.4	757.0	715.3	691.4	684.2
12.5°	957.7	946.9	917.1	884.8	841.8	765.4	665.1	564.8	487.2	452.6	443.0
15°	963.6	949.3	909.9	865.7	785.7	630.5	468.1	335.5	250.8	224.5	218.5
17.5°	969.6	949.3	899.1	839.4	683.0	457.3	266.3	176.7	149.3	143.3	143.3
20°	972.0	946.9	884.8	790.5	545.7	284.2	158.8	132.5	121.8	118.2	118.2
22.5°	981.5	948.1	874.1	720.0	396.4	167.2	125.4	111.0	100.3	96.7	96.7
25°	1005.4	962.4	876.5	630.5	254.3	126.6	106.3	91.9	81.2	76.4	76.4
27.5°	1043.6	994.7	889.6	526.6	160.0	108.7	89.6	74.0	65.7	60.9	60.9
30°	1086.6	1030.5	895.6	407.2	119.4	91.9	72.8	58.5	52.5	49.0	47.8
32.5°	1161.8	1092.6	890.8	279.4	97.9	77.6	58.5	46.6	41.8	40.6	40.6
35°	1282.4	1201.2	881.2	175.5	81.2	62.1	46.6	38.2	34.6	33.4	32.2
37.5°	1446.0	1360.1	852.6	115.8	66.9	49.0	38.2	32.2	28.7	27.5	27.5
40°	1645.4	1541.6	797.6	88.4	57.3	39.4	32.2	27.5	25.1	23.9	23.9
42.5°	1873.5	1743.4	710.5	76.4	47.8	33.4	27.5	22.7	21.5	20.3	20.3
45°	2123.1	1954.7	589.9	68.1	40.6	27.5	22.7	20.3	17.9	17.9	16.7
47.5°	2388.2	2167.3	453.8	59.7	34.6	23.9	20.3	16.7	15.5	14.3	14.3
50°	2643.7	2357.1	318.8	51.3	28.7	20.3	16.7	14.3	13.1	11.9	11.9
52.5°	2824.0	2471.7	225.7	44.2	23.9	17.9	13.1	10.7	9.6	9.6	9.6
55°	2968.5	2543.4	157.6	37.0	20.3	15.5	10.7	8.4	8.4	7.2	7.2
57.5°	3104.6	2590.0	115.8	31.0	16.7	11.9	8.4	6.0	6.0	4.8	4.8
60°	3245.5	2615.0	88.4	25.1	14.3	9.6	6.0	4.8	3.6	3.6	3.6
62.5°	3387.6	2630.6	68.1	20.3	11.9	7.2	4.8	3.6	2.4	1.2	1.2
65°	3511.8	2635.3	52.5	15.5	9.6	4.8	3.6	1.2	0.0	0.0	0.0
67.5°	3548.8	2580.4	40.6	11.9	7.2	3.6	2.4	0.0	0.0	0.0	0.0
70°	3448.5	2434.7	31.0	9.6	6.0	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	3060.4	2041.9	23.9	6.0	4.8	2.4	1.2	0.0	0.0	0.0	0.0
75°	2189.9	1089.0	16.7	4.8	3.6	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	1007.8	421.5	11.9	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0
80°	197.0	105.1	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.4	17.9	2.4	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.5	6.0	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	2.4	1.2	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)