

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: P397592

Luminaire Tested: **ARCH-S-PA1-100-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397592
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-PA1-100-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1200mA 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: 6390 lumens
Efficiency: N/A
Efficacy: 66.6 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): 96
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

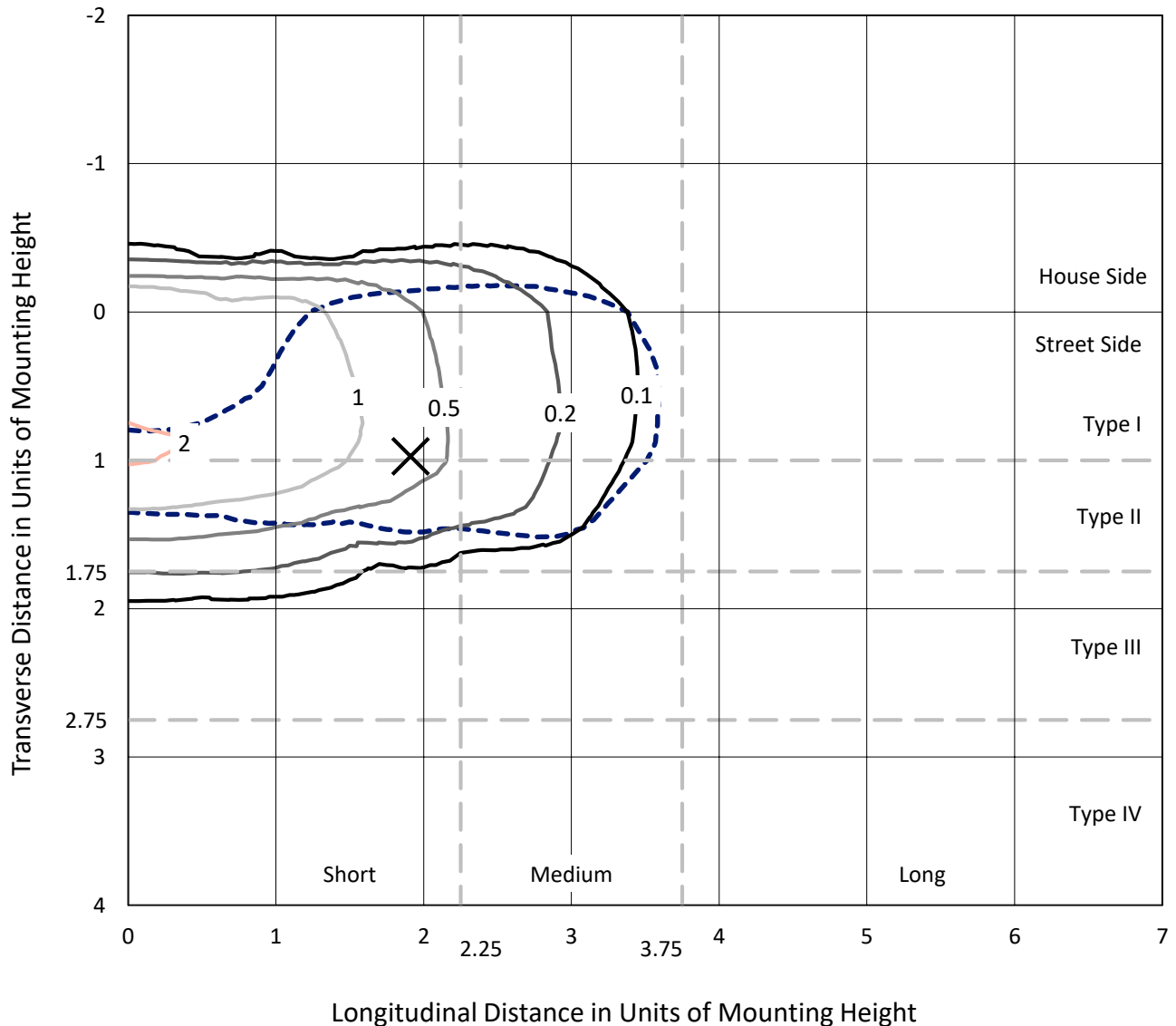


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

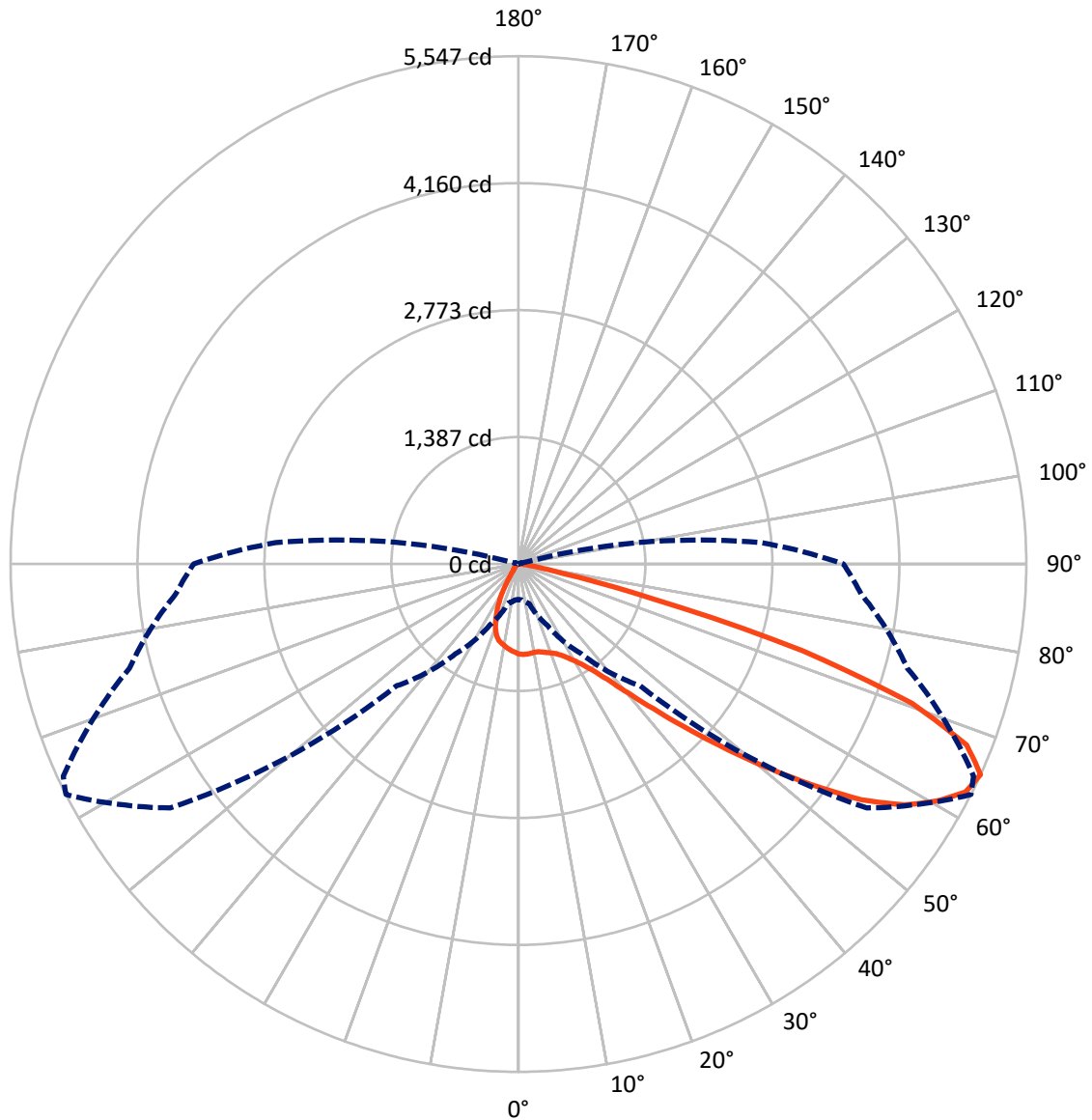


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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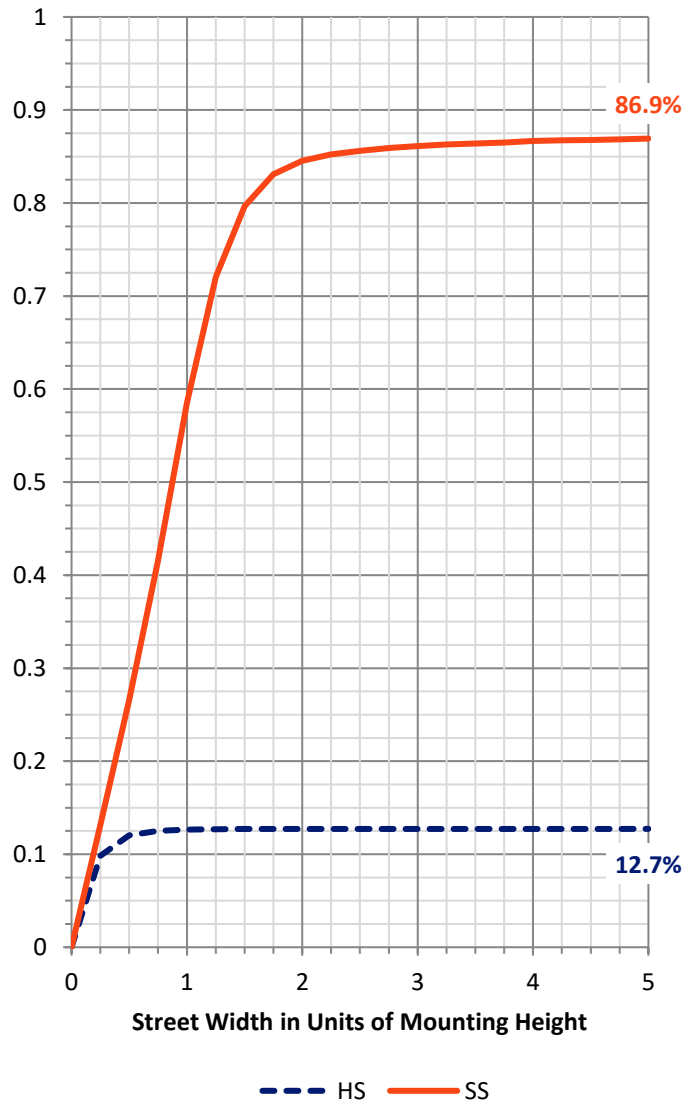
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	822.4	0.0	822.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5567.6	0.0	5567.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	6390.0	0.0	6390.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	1.4
10°-20°	221.6	3.5
20°-30°	328.4	5.1
30°-40°	609.8	9.5
40°-50°	1291.8	20.2
50°-60°	1786.3	28.0
60°-70°	1430.0	22.4
70°-80°	594.1	9.3
80°-90°	38.1	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°	6390.0	100.0
0°-180°	6390.0	100.0



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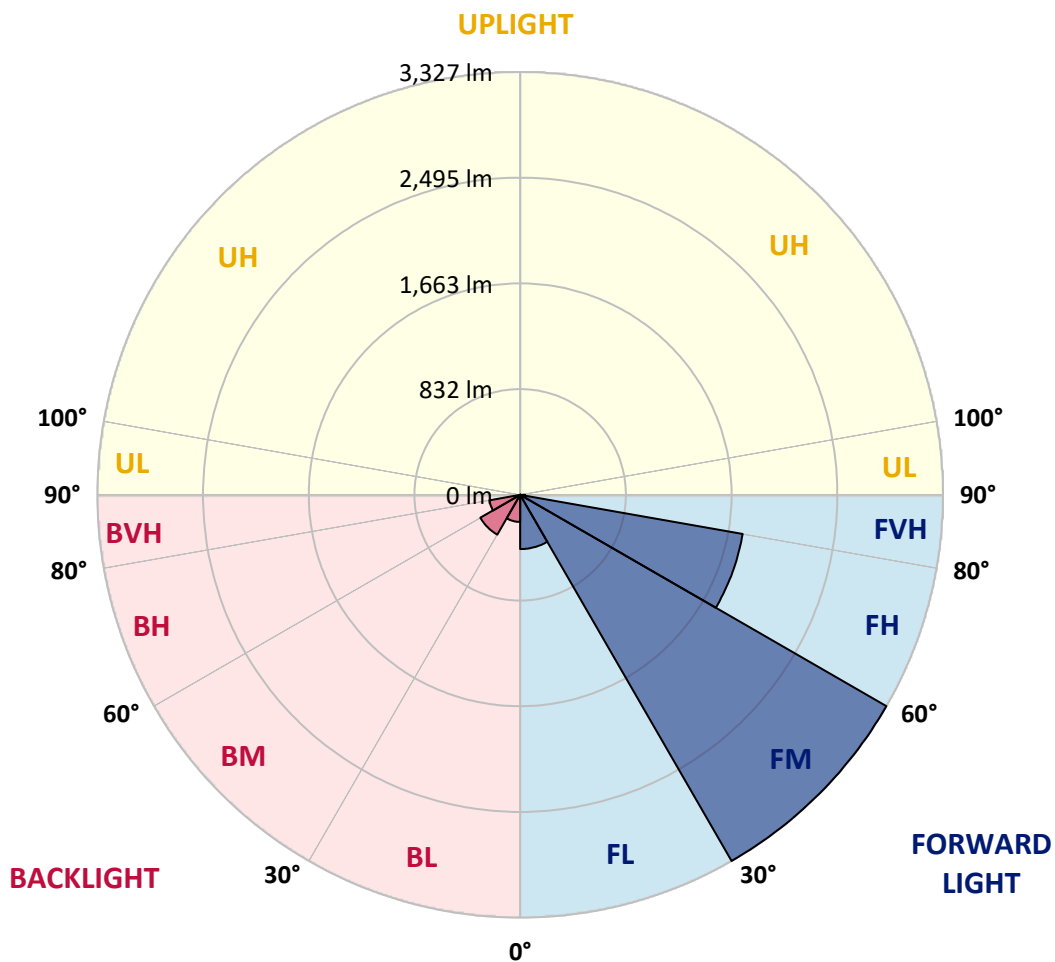
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	426.7	6.7			
FM (30°-60°)	3326.7	52.1			
FH (60°-80°)	1777.8	27.8			G1/1800
FVH (80°-90°)	36.4	0.6			G1/100
BL (0°-30°)	213.1	3.3	B1/500		
BM (30°-60°)	361.3	5.7	B1/1000		
BH (60°-80°)	246.2	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°	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4
2.5°	1001.3	998.9	996.4	995.2	995.2	994.0	989.2	988.0	985.6	983.2	980.8
5°	991.6	988.0	986.8	988.0	989.2	991.6	989.2	989.2	986.8	984.4	979.6
7.5°	967.5	965.1	966.3	969.9	971.1	979.6	980.8	984.4	984.4	982.0	978.4
10°	938.5	937.3	937.3	943.4	949.4	961.5	969.9	979.6	980.8	980.8	974.7
12.5°	916.8	915.6	919.2	926.5	938.5	954.2	968.7	983.2	985.6	986.8	977.1
15°	903.6	903.6	908.4	922.9	939.7	961.5	978.4	997.7	1000.1	998.9	985.6
17.5°	891.5	892.7	902.4	926.5	945.8	974.7	995.2	1017.0	1018.2	1017.0	995.2
20°	886.7	889.1	903.6	934.9	956.6	989.2	1015.7	1037.5	1038.7	1033.8	1004.9
22.5°	899.9	901.1	919.2	953.0	973.5	1009.7	1043.5	1064.0	1065.2	1058.0	1019.4
25°	945.8	945.8	961.5	990.4	1008.5	1044.7	1080.9	1105.0	1105.0	1096.6	1051.9
27.5°	1053.1	1043.5	1039.9	1048.3	1054.4	1093.0	1131.6	1161.7	1160.5	1148.4	1094.2
30°	1260.6	1236.5	1197.9	1154.5	1132.8	1159.3	1195.5	1234.1	1232.9	1213.6	1146.0
32.5°	1609.3	1574.3	1482.6	1368.0	1275.1	1245.0	1278.7	1321.0	1322.2	1299.2	1229.3
35°	2097.8	2042.4	1878.3	1719.1	1506.7	1392.1	1401.8	1447.6	1462.1	1450.0	1369.2
37.5°	2568.3	2517.7	2360.8	2140.1	1851.7	1617.7	1576.7	1616.5	1633.4	1633.4	1547.7
40°	3042.4	2983.3	2844.6	2622.6	2318.6	1970.0	1822.8	1855.4	1873.5	1877.1	1764.9
42.5°	3422.4	3383.8	3277.7	3105.1	2820.5	2587.6	2177.5	2159.4	2176.3	2163.0	2017.0
45°	3685.4	3655.2	3581.7	3516.5	3377.8	3260.8	2651.6	2529.7	2540.6	2494.7	2300.5
47.5°	3739.7	3705.9	3690.2	3780.7	3879.6	3908.6	3234.2	2970.0	2959.2	2857.8	2594.9
50°	3503.2	3506.9	3564.8	3822.9	4235.5	4496.1	3909.8	3467.1	3427.2	3201.7	2868.7
52.5°	2993.0	3050.9	3196.8	3615.4	4344.1	4923.1	4585.3	3994.2	3932.7	3535.8	3073.8
55°	2341.5	2416.3	2656.4	3137.7	4117.3	5113.7	5154.7	4541.9	4402.0	3786.7	3233.0
57.5°	1740.8	1763.7	2043.6	2482.7	3580.5	4926.7	5446.7	4964.1	4784.4	3987.0	3391.1
60°	1084.5	1099.0	1394.5	1890.4	2711.9	4235.5	5446.7	5254.9	5083.6	4166.7	3535.8
62.5°	674.4	679.2	790.2	1295.6	1843.3	3141.3	5221.1	5480.5	5342.9	4295.8	3660.1
65°	388.4	393.3	445.1	732.3	1199.1	1880.7	4644.5	5546.8	5485.3	4398.4	3756.6
67.5°	283.5	285.9	306.4	411.4	784.1	966.3	3488.8	5280.2	5357.4	4449.0	3754.2
70°	246.1	249.7	276.3	320.9	565.8	593.5	1775.7	4560.0	4775.9	4376.6	3642.0
72.5°	189.4	194.2	234.0	301.6	415.0	427.0	643.0	3245.1	3572.0	3924.3	3334.4
75°	130.3	135.1	174.9	248.5	342.6	319.7	353.5	1493.5	1884.3	2632.3	2538.2
77.5°	83.2	84.4	109.8	181.0	295.6	226.8	242.5	487.4	684.0	1190.7	1197.9
80°	55.5	56.7	67.6	117.0	202.7	209.9	149.6	225.6	247.3	347.4	241.3
82.5°	33.8	33.8	45.8	73.6	123.0	173.7	97.7	118.2	126.7	133.9	62.7
85°	13.3	13.3	27.7	48.3	77.2	80.8	61.5	68.8	72.4	78.4	29.0
87.5°	3.6	3.6	15.7	26.5	33.8	37.4	37.4	33.8	36.2	44.6	14.5
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°	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4	984.4
2.5°	979.6	975.9	971.1	966.3	961.5	957.8	954.2	954.2	951.8	948.2	945.8
5°	977.1	971.1	960.3	951.8	938.5	928.9	921.7	915.6	912.0	903.6	902.4
7.5°	973.5	966.3	950.6	933.7	912.0	895.1	878.2	866.2	854.1	844.4	842.0
10°	967.5	959.0	936.1	912.0	881.8	850.5	810.7	764.8	722.6	698.5	691.2
12.5°	967.5	956.6	926.5	893.9	850.5	773.3	671.9	570.6	492.2	457.2	447.6
15°	973.5	959.0	919.2	874.6	793.8	637.0	472.9	339.0	253.3	226.8	220.8
17.5°	979.6	959.0	908.4	848.1	690.0	462.0	269.0	178.5	150.8	144.8	144.8
20°	982.0	956.6	893.9	798.6	551.3	287.1	160.4	133.9	123.0	119.4	119.4
22.5°	991.6	957.8	883.0	727.4	400.5	168.9	126.7	112.2	101.3	97.7	97.7
25°	1015.7	972.3	885.5	637.0	257.0	127.9	107.4	92.9	82.0	77.2	77.2
27.5°	1054.4	1004.9	898.7	532.0	161.7	109.8	90.5	74.8	66.3	61.5	61.5
30°	1097.8	1041.1	904.8	411.4	120.6	92.9	73.6	59.1	53.1	49.5	48.3
32.5°	1173.8	1103.8	899.9	282.3	98.9	78.4	59.1	47.0	42.2	41.0	41.0
35°	1295.6	1213.6	890.3	177.3	82.0	62.7	47.0	38.6	35.0	33.8	32.6
37.5°	1460.9	1374.0	861.3	117.0	67.6	49.5	38.6	32.6	29.0	27.7	27.7
40°	1662.4	1557.4	805.8	89.3	57.9	39.8	32.6	27.7	25.3	24.1	24.1
42.5°	1892.8	1761.3	717.8	77.2	48.3	33.8	27.7	22.9	21.7	20.5	20.5
45°	2144.9	1974.8	595.9	68.8	41.0	27.7	22.9	20.5	18.1	18.1	16.9
47.5°	2412.7	2189.5	458.4	60.3	35.0	24.1	20.5	16.9	15.7	14.5	14.5
50°	2670.9	2381.3	322.1	51.9	29.0	20.5	16.9	14.5	13.3	12.1	12.1
52.5°	2853.0	2497.1	228.0	44.6	24.1	18.1	13.3	10.9	9.7	9.7	9.7
55°	2999.0	2569.5	159.2	37.4	20.5	15.7	10.9	8.4	8.4	7.2	7.2
57.5°	3136.5	2616.6	117.0	31.4	16.9	12.1	8.4	6.0	6.0	4.8	4.8
60°	3278.9	2641.9	89.3	25.3	14.5	9.7	6.0	4.8	3.6	3.6	3.6
62.5°	3422.4	2657.6	68.8	20.5	12.1	7.2	4.8	3.6	2.4	1.2	1.2
65°	3547.9	2662.4	53.1	15.7	9.7	4.8	3.6	1.2	0.0	0.0	0.0
67.5°	3585.3	2606.9	41.0	12.1	7.2	3.6	2.4	0.0	0.0	0.0	0.0
70°	3483.9	2459.8	31.4	9.7	6.0	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	3091.9	2062.9	24.1	6.0	4.8	2.4	1.2	0.0	0.0	0.0	0.0
75°	2212.4	1100.2	16.9	4.8	3.6	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	1018.2	425.8	12.1	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0
80°	199.0	106.2	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.8	18.1	2.4	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.7	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)