

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: P397783

Luminaire Tested: **ARCH-S-PA1-40-750-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-750-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4378 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 40
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

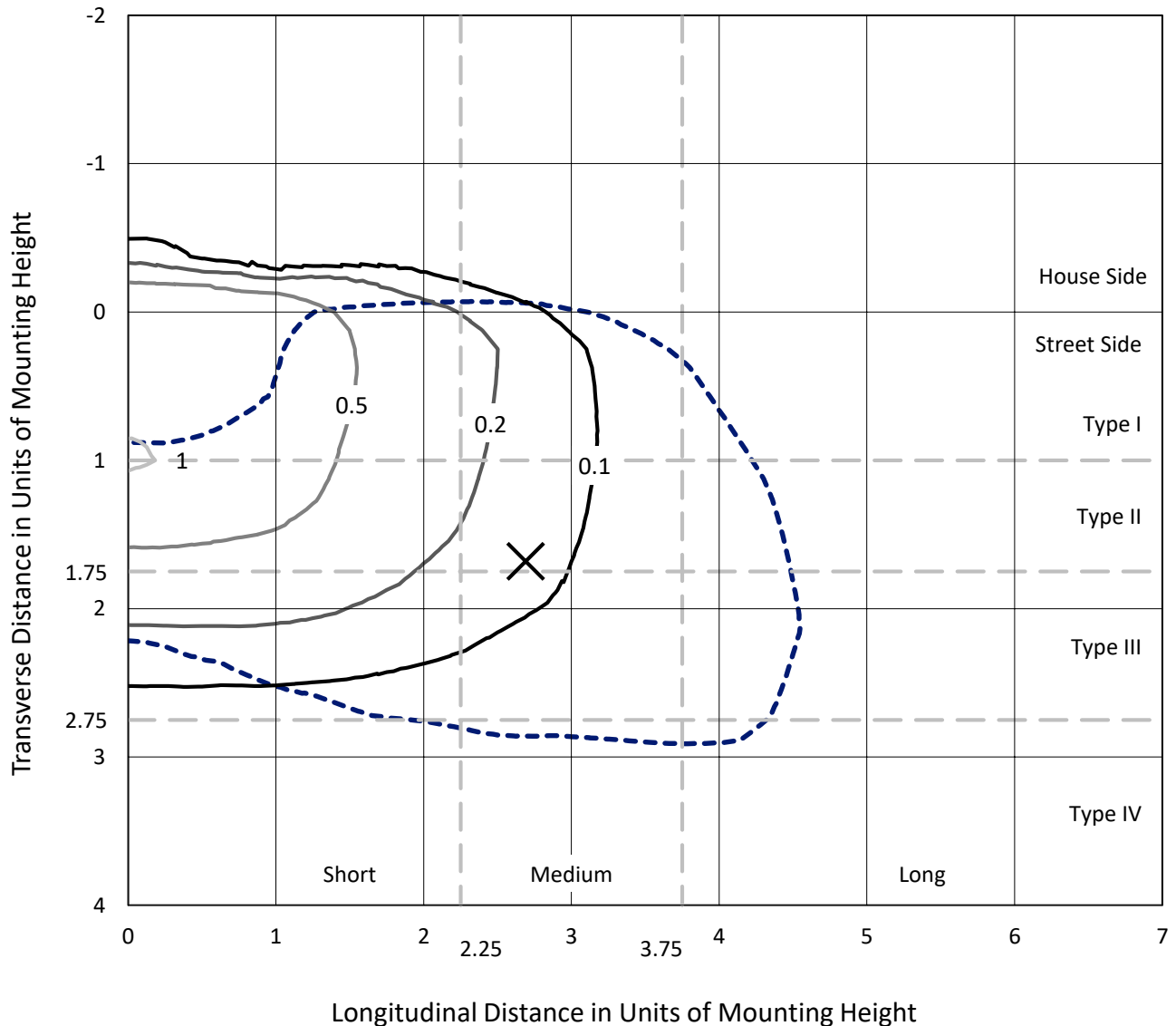


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

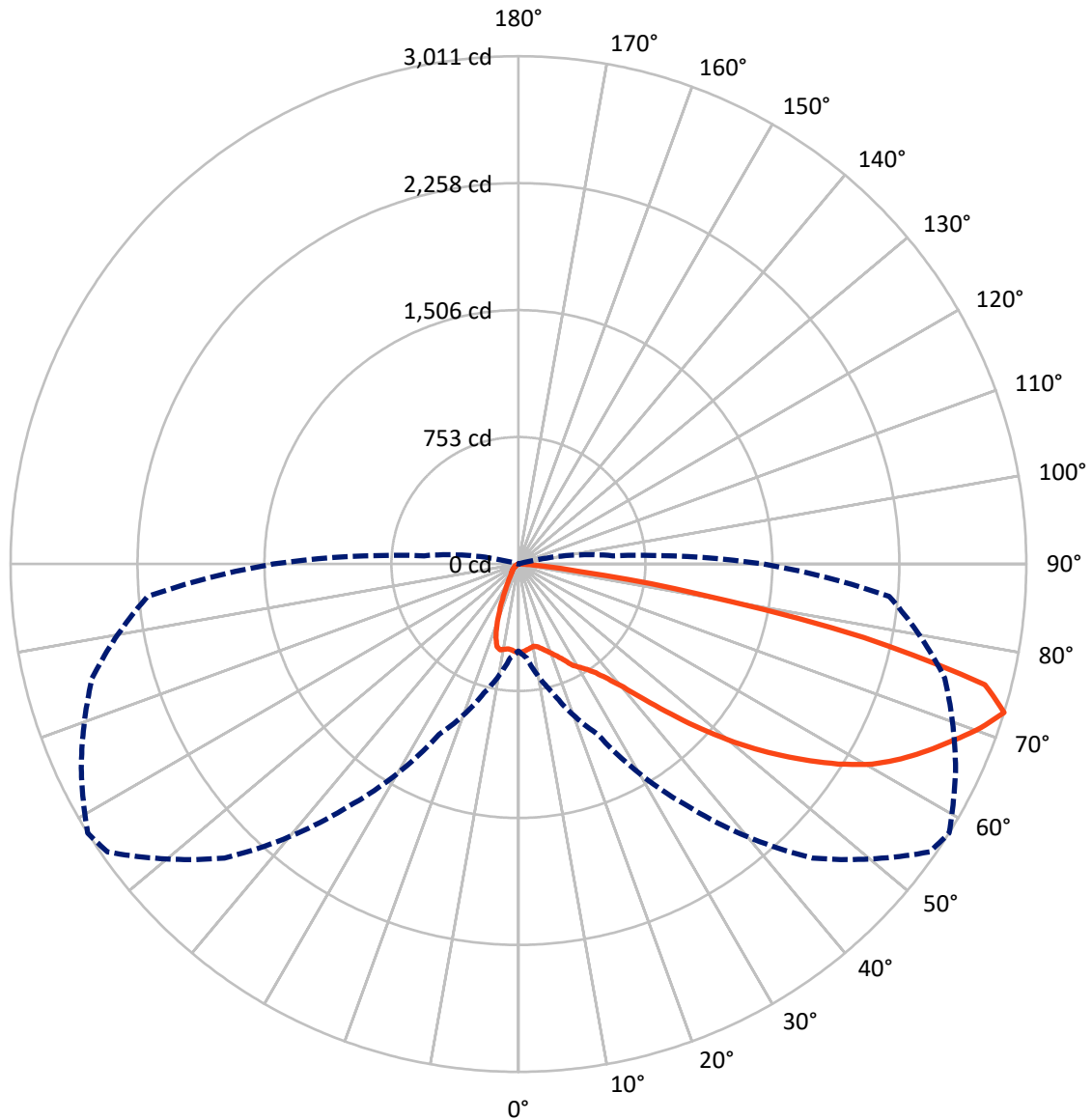


Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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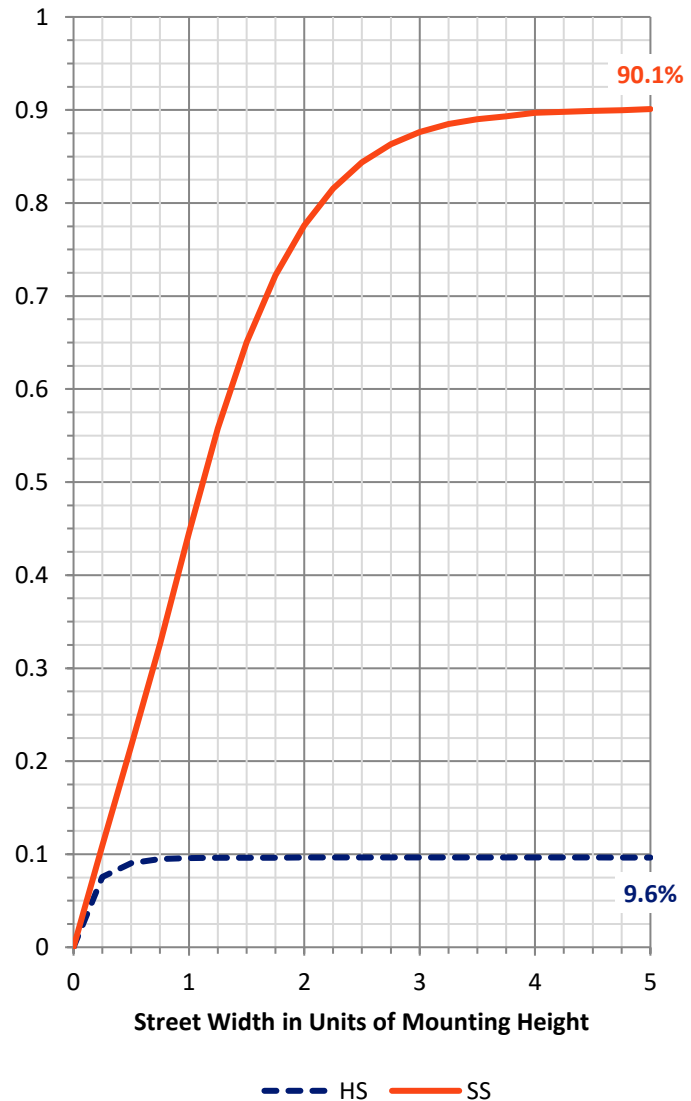
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	425.7	0.0	425.7
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	3952.3	0.0	3952.3
	% Fixture	90.3	0.0	90.3
Total	Lumens	4378.0	0.0	4378.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	1.1
10°-20°	125.6	2.9
20°-30°	197.3	4.5
30°-40°	340.2	7.8
40°-50°	647.3	14.8
50°-60°	1025.1	23.4
60°-70°	1196.1	27.3
70°-80°	749.1	17.1
80°-90°	49.2	1.1
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°	4378.0	100.0
0°-180°	4378.0	100.0



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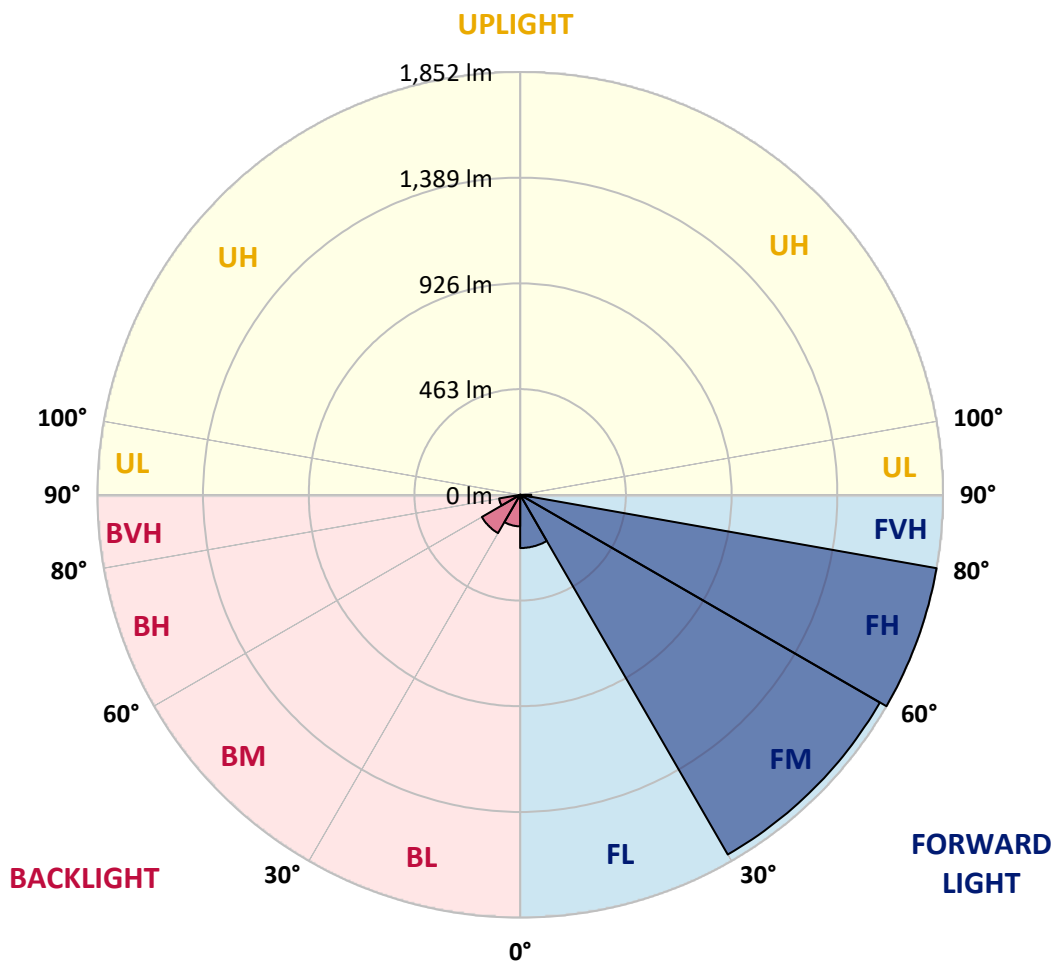
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	233.2	5.3			
FM	(30°-60°)	1818.8	41.5			
FH	(60°-80°)	1851.6	42.3			G2/5000
FVH	(80°-90°)	48.7	1.1			G1/100
BL	(0°-30°)	137.9	3.1	B1/500		
BM	(30°-60°)	193.7	4.4	B0/220		
BH	(60°-80°)	93.7	2.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3
2.5°	523.0	520.6	519.9	519.1	519.9	520.6	518.3	520.6	519.1	519.9	521.4
5°	504.2	501.8	501.1	501.8	504.2	508.1	509.7	512.0	512.0	514.4	515.2
7.5°	483.1	481.5	480.7	482.3	487.0	495.6	500.3	503.4	506.5	511.2	515.9
10°	471.3	470.5	469.7	472.1	476.8	484.6	490.9	495.6	507.3	520.6	529.2
12.5°	463.5	463.5	465.0	469.7	476.0	482.3	497.1	503.4	521.4	541.8	553.5
15°	457.2	457.2	459.6	468.2	476.8	491.7	513.6	520.6	541.8	566.8	582.5
17.5°	452.5	454.1	455.7	464.3	480.7	505.8	531.6	541.8	567.6	595.0	612.2
20°	453.3	454.9	455.7	464.3	487.8	522.2	555.1	566.8	596.6	625.5	642.8
22.5°	458.0	460.4	461.1	472.9	500.3	539.4	581.7	595.0	627.1	657.6	671.0
25°	477.6	479.1	474.4	484.6	518.3	566.0	616.2	630.2	662.3	690.5	701.5
27.5°	544.1	545.7	519.9	508.1	532.4	588.0	658.4	678.0	717.9	736.7	738.3
30°	688.2	689.7	638.9	583.3	566.0	606.8	681.9	709.3	761.0	782.1	772.7
32.5°	873.7	872.2	802.5	720.3	645.9	639.6	715.6	744.5	800.9	821.3	814.2
35°	1060.1	1062.4	1002.9	879.2	772.7	701.5	758.6	792.3	860.4	889.4	876.9
37.5°	1187.7	1203.3	1177.5	1043.6	928.5	815.8	828.3	864.3	949.7	988.8	962.2
40°	1367.7	1363.8	1301.2	1202.6	1100.8	984.9	941.1	958.3	1056.1	1108.6	1067.1
42.5°	1609.7	1601.8	1495.4	1399.1	1285.5	1190.8	1101.6	1098.4	1178.3	1239.3	1179.1
45°	1828.9	1817.1	1744.3	1651.2	1526.7	1417.9	1297.3	1269.9	1325.5	1377.1	1306.7
47.5°	2003.5	1983.9	1932.2	1882.9	1852.4	1683.3	1502.4	1460.9	1489.1	1527.5	1428.0
50°	2210.2	2156.1	2081.0	2051.2	2114.6	1983.9	1699.7	1659.8	1658.2	1680.1	1553.3
52.5°	2304.1	2206.2	2164.0	2189.0	2301.0	2263.4	1912.7	1855.5	1832.8	1835.1	1669.9
55°	2190.6	2179.6	2202.3	2280.6	2427.0	2405.1	2117.0	2046.5	2012.9	1970.6	1781.9
57.5°	2061.4	2095.1	2185.1	2334.6	2586.7	2553.1	2318.2	2238.3	2176.5	2079.4	1906.4
60°	1942.4	1976.9	2125.6	2347.2	2674.4	2695.6	2485.7	2409.8	2318.2	2190.6	2043.4
62.5°	1761.5	1788.2	1997.2	2329.2	2636.1	2778.6	2602.4	2545.2	2459.9	2296.3	2200.8
65°	1558.0	1575.2	1781.9	2185.1	2560.9	2769.2	2698.7	2666.6	2583.6	2406.7	2356.6
67.5°	1334.9	1355.2	1527.5	1926.0	2413.7	2725.3	2789.5	2786.4	2691.6	2528.8	2469.3
70°	1078.1	1079.6	1222.1	1597.1	2156.9	2637.6	2902.3	2909.3	2795.0	2620.4	2474.0
72.5°	515.9	558.2	792.3	1114.9	1752.9	2465.4	2975.8	3011.1	2860.0	2617.3	2207.0
75°	118.2	122.1	231.0	530.0	1028.0	1892.3	2791.9	2857.6	2701.8	2263.4	1554.9
77.5°	43.1	45.4	65.0	155.0	395.4	977.9	1998.0	2094.3	1997.2	1463.3	735.2
80°	29.0	28.2	33.7	68.9	181.6	277.2	1021.7	1078.9	984.9	499.5	176.2
82.5°	14.9	15.7	23.5	38.4	122.1	96.3	341.3	371.1	305.3	100.2	32.9
85°	7.0	7.0	13.3	24.3	51.7	33.7	75.9	91.6	82.2	43.8	11.0
87.5°	7.0	7.0	12.5	15.7	26.6	14.1	18.8	23.5	21.9	23.5	3.9
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°	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3	525.3
2.5°	521.4	520.6	519.9	521.4	520.6	522.2	522.2	523.8	523.8	522.2	521.4
5°	514.4	512.8	511.2	511.2	510.5	512.0	516.7	520.6	521.4	519.1	518.3
7.5°	515.2	515.2	513.6	510.5	505.0	505.0	505.0	509.7	512.0	510.5	509.7
10°	529.2	530.0	526.1	519.1	509.7	501.1	484.6	460.4	437.6	431.4	429.0
12.5°	553.5	554.3	546.5	533.9	514.4	463.5	400.9	342.9	298.3	285.8	283.4
15°	582.5	583.3	569.2	548.8	489.3	371.1	277.9	212.2	173.0	163.6	162.8
17.5°	612.2	610.7	589.5	550.4	414.9	263.1	169.1	135.4	125.3	122.9	123.7
20°	641.2	636.5	607.5	521.4	319.4	172.2	123.7	115.9	113.5	112.0	112.0
22.5°	667.8	658.4	622.4	464.3	223.9	123.7	110.4	108.8	105.7	103.3	102.6
25°	694.4	681.1	631.8	389.9	150.3	108.0	104.1	101.0	97.1	93.9	93.2
27.5°	726.5	707.8	627.1	295.9	112.7	100.2	97.1	92.4	86.9	82.2	80.6
30°	757.1	735.9	600.5	204.3	96.3	92.4	87.7	80.6	73.6	68.1	66.5
32.5°	795.4	771.2	552.7	133.9	83.8	80.6	75.9	67.3	57.9	51.7	50.1
35°	850.2	822.8	491.7	93.9	73.6	68.1	61.8	52.5	42.3	37.6	36.8
37.5°	927.0	890.2	414.9	75.9	65.0	57.2	47.8	38.4	31.3	27.4	26.6
40°	1020.9	964.5	329.6	67.3	57.9	47.8	36.0	27.4	22.7	19.6	19.6
42.5°	1122.7	1034.2	242.7	61.8	50.9	39.1	26.6	19.6	16.4	14.9	14.1
45°	1227.6	1096.1	163.6	57.2	44.6	29.8	18.8	13.3	11.0	11.0	10.2
47.5°	1336.4	1137.6	105.7	51.7	37.6	21.9	12.5	9.4	7.8	7.8	7.8
50°	1444.5	1159.5	75.2	47.0	30.5	14.9	9.4	7.0	6.3	6.3	6.3
52.5°	1522.8	1145.4	60.3	40.7	23.5	11.0	7.0	5.5	4.7	4.7	4.7
55°	1590.9	1121.1	52.5	35.2	17.2	7.8	5.5	4.7	3.9	3.9	3.9
57.5°	1660.6	1089.8	47.0	29.8	12.5	5.5	3.9	3.1	3.1	3.1	3.1
60°	1724.0	1036.6	40.7	23.5	8.6	3.9	3.1	2.3	2.3	2.3	2.3
62.5°	1785.8	991.2	35.2	18.0	6.3	3.1	1.6	1.6	0.8	0.8	0.8
65°	1821.1	930.1	28.2	11.7	3.9	2.3	0.8	0.8	0.0	0.0	0.0
67.5°	1810.1	857.3	19.6	7.0	2.3	1.6	0.8	0.0	0.0	0.0	0.0
70°	1734.1	759.4	11.7	3.9	2.3	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	1452.3	562.1	7.0	3.1	1.6	0.8	0.0	0.0	0.0	0.0	0.0
75°	970.0	258.4	3.9	2.3	0.8	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	443.9	77.5	2.3	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	89.3	20.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.8	3.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	0.0	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)