

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: P397686

Luminaire Tested: **ARCH-S-PA1-30-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-30-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2785 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

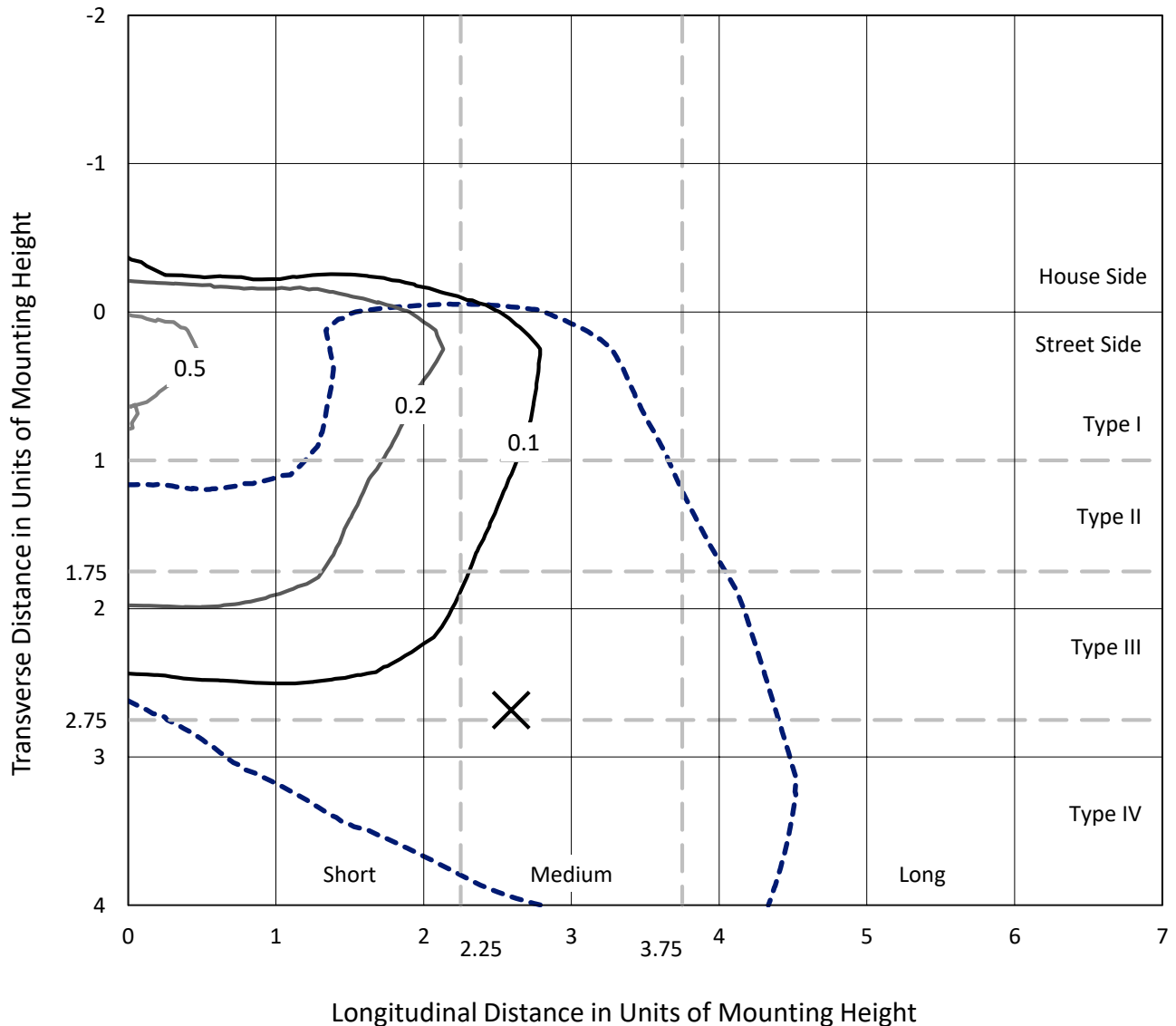
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

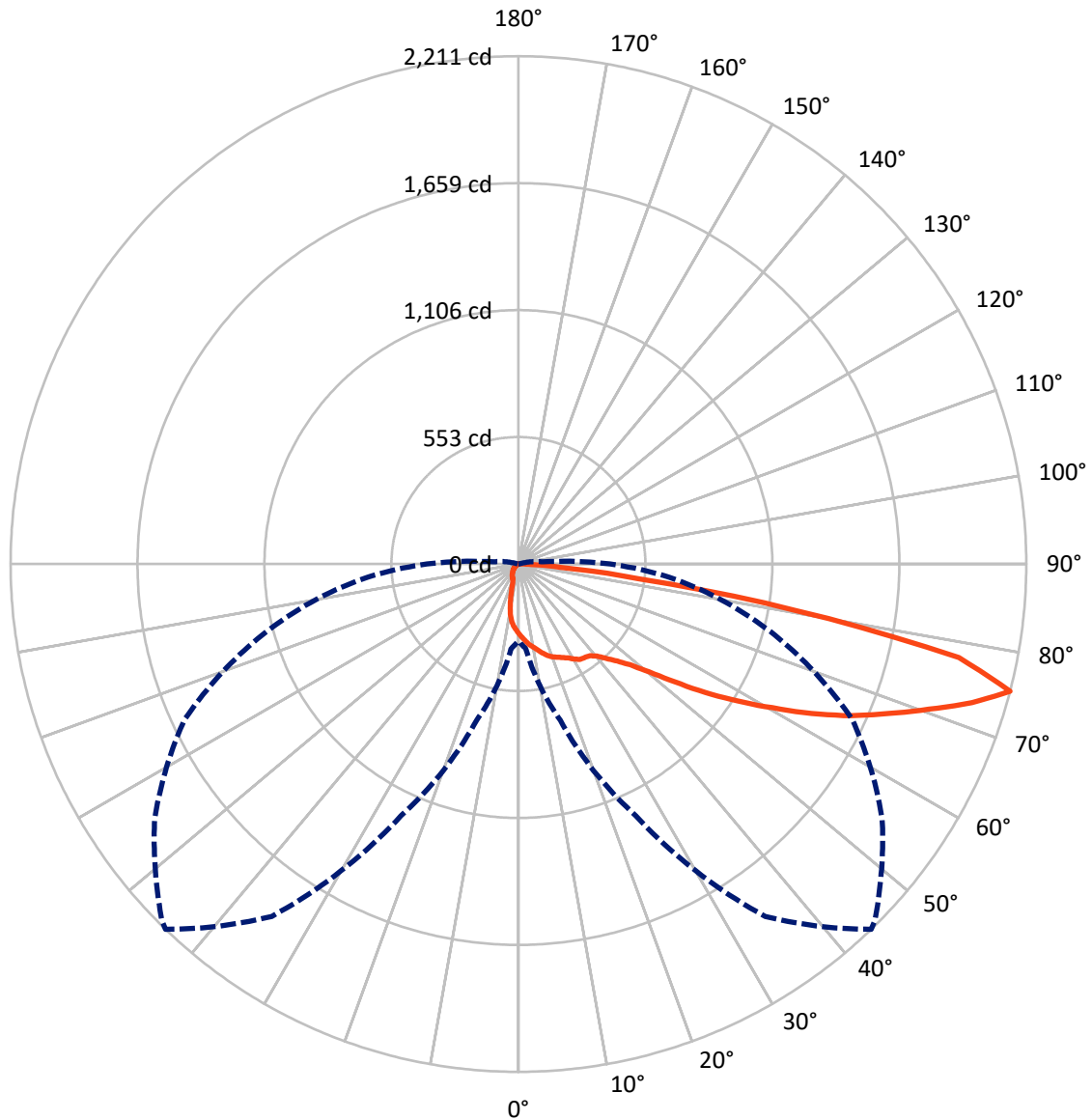
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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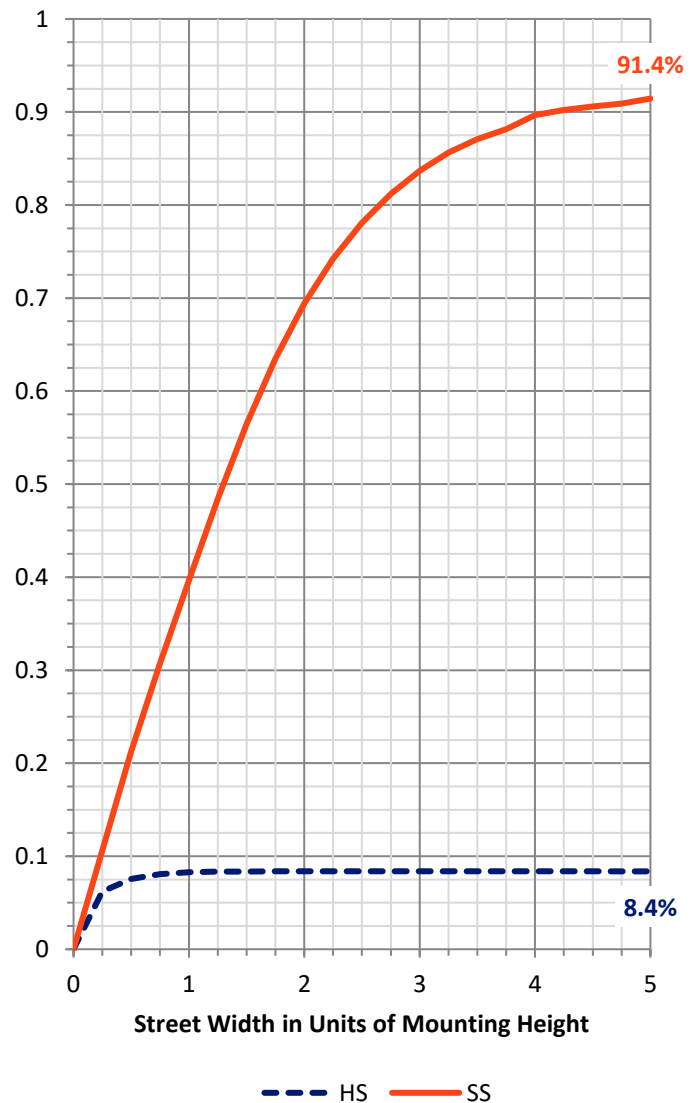
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	234.9	0.0	234.9
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	2550.1	0.0	2550.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	2785.0	0.0	2785.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	1.0
10°-20°	80.1	2.9
20°-30°	132.2	4.7
30°-40°	191.9	6.9
40°-50°	311.9	11.2
50°-60°	549.9	19.7
60°-70°	790.2	28.4
70°-80°	632.8	22.7
80°-90°	67.4	2.4
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°	2785.0	100.0
0°-180°	2785.0	100.0



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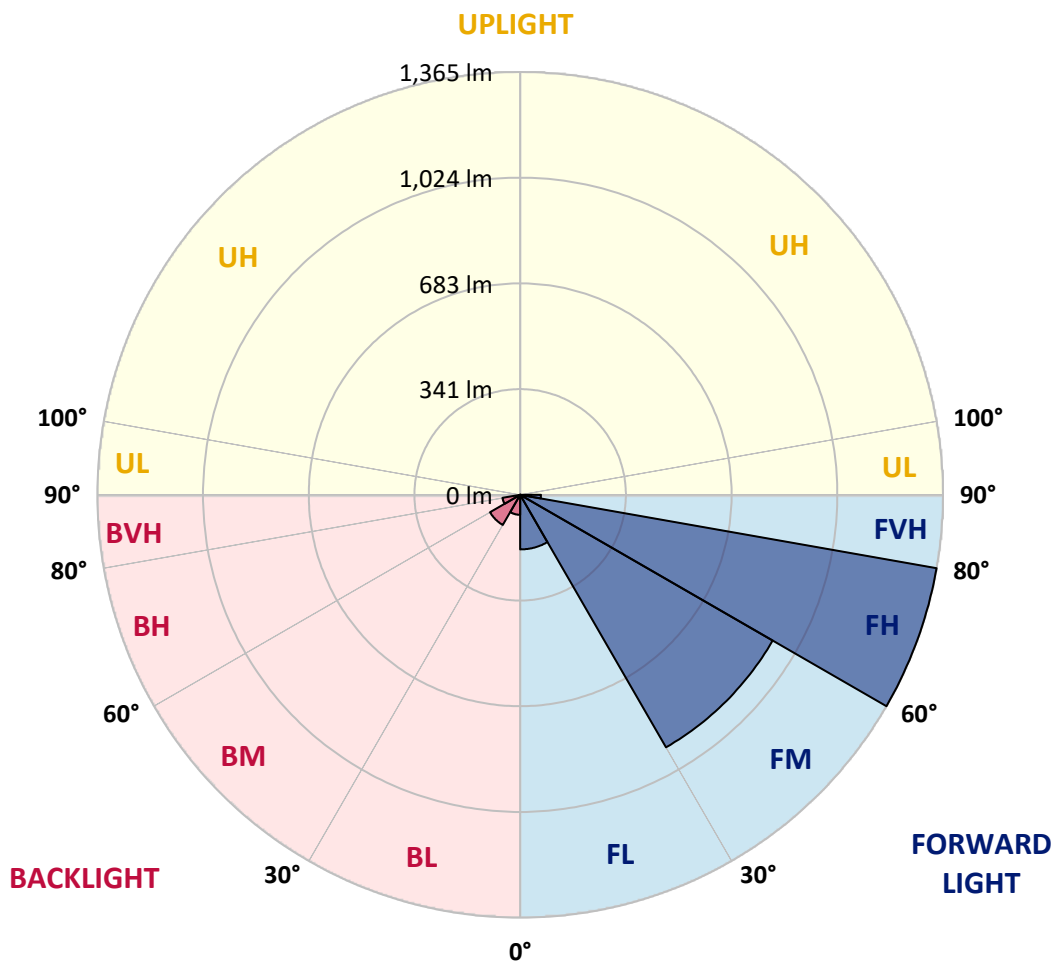
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	176.4	6.3			
FM	(30°-60°)	941.4	33.8			
FH	(60°-80°)	1365.2	49.0			G1/1800
FVH	(80°-90°)	67.3	2.4			G1/100
BL	(0°-30°)	64.5	2.3	B0/110		
BM	(30°-60°)	112.3	4.0	B0/220		
BH	(60°-80°)	57.9	2.1	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	330.4	329.9	328.3	325.7	323.2	320.6	320.1	316.0	311.4	307.8	304.7
5°	359.7	359.1	356.6	350.9	345.3	338.6	338.1	328.3	319.6	309.8	301.6
7.5°	390.0	388.9	384.3	375.6	365.8	355.5	354.5	340.1	327.3	314.4	302.6
10°	413.6	412.6	405.9	395.6	382.3	369.4	367.9	353.0	340.1	323.7	307.8
12.5°	436.7	434.7	425.9	414.6	398.2	385.9	384.3	368.9	353.5	336.5	317.0
15°	458.3	455.7	447.5	433.1	415.7	403.8	402.8	386.4	370.4	350.9	329.3
17.5°	473.2	472.2	462.4	446.5	429.5	419.8	418.7	401.8	385.9	365.3	342.2
20°	480.9	480.9	471.7	454.2	438.8	432.1	430.6	414.6	399.2	379.7	355.5
22.5°	482.4	484.0	476.8	457.8	446.5	440.8	439.8	425.9	411.0	393.1	370.4
25°	485.5	485.5	481.9	461.4	453.2	451.6	451.1	438.8	425.4	407.4	385.3
27.5°	489.1	489.1	486.6	466.5	463.4	462.9	462.4	456.8	446.0	424.9	402.8
30°	498.4	498.9	496.8	476.8	474.7	480.4	481.4	478.3	465.0	438.8	420.8
32.5°	521.5	516.9	511.2	484.0	487.6	494.8	495.3	489.1	474.7	453.7	442.4
35°	579.6	552.3	526.6	490.2	491.7	498.9	499.9	499.4	490.7	472.7	467.0
37.5°	633.5	595.0	558.5	504.5	499.4	507.1	509.2	517.9	511.2	498.9	500.4
40°	664.8	649.9	624.3	544.1	514.8	526.6	528.7	542.0	539.5	534.3	544.1
42.5°	761.4	762.5	734.7	603.2	543.1	562.1	564.7	575.4	579.0	581.6	605.2
45°	873.4	877.0	870.4	709.5	596.5	602.7	606.3	620.7	634.0	650.5	693.6
47.5°	1008.1	1005.0	980.3	839.5	689.5	655.1	657.7	685.4	708.5	744.5	806.1
50°	1127.3	1135.0	1088.2	960.8	820.5	737.8	735.2	762.5	804.1	854.4	932.0
52.5°	1247.5	1236.2	1173.0	1081.0	975.7	850.3	842.6	857.5	916.1	975.7	1055.3
55°	1279.3	1280.4	1258.8	1212.5	1105.2	987.0	974.1	973.1	1046.1	1086.7	1184.8
57.5°	1342.0	1344.6	1349.7	1359.0	1308.1	1123.7	1110.3	1095.9	1166.8	1190.5	1314.8
60°	1405.7	1408.8	1440.2	1490.0	1456.1	1271.1	1256.7	1222.8	1262.4	1294.2	1451.5
62.5°	1397.5	1419.1	1510.0	1609.2	1605.1	1433.0	1415.0	1333.3	1358.5	1386.2	1576.8
65°	1261.9	1285.0	1489.5	1642.1	1754.6	1592.8	1563.5	1447.3	1448.9	1482.3	1697.6
67.5°	1140.6	1165.8	1361.0	1628.2	1853.2	1736.1	1705.8	1561.9	1537.8	1593.3	1762.3
70°	1070.7	1095.9	1258.8	1585.0	1881.0	1894.9	1868.7	1692.9	1643.6	1694.5	1689.9
72.5°	838.0	877.6	1128.3	1502.8	1910.8	2064.9	2044.4	1858.9	1733.5	1588.6	1286.5
75°	334.0	370.4	704.4	1209.5	1873.3	2211.4	2195.4	1933.4	1604.6	1134.5	658.7
77.5°	100.7	107.9	195.8	598.1	1373.4	1960.6	1955.5	1625.6	1135.5	526.6	179.8
80°	33.4	37.0	60.1	164.9	626.8	1224.9	1248.0	1035.8	515.8	120.7	36.5
82.5°	13.9	15.4	30.3	66.3	222.0	527.7	520.0	464.0	179.8	75.0	13.4
85°	3.6	4.6	13.9	38.0	81.2	181.9	191.1	155.7	101.7	62.2	4.1
87.5°	0.0	0.0	6.7	15.4	36.5	55.0	57.5	47.3	57.5	46.8	2.1
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°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	302.1	299.5	294.9	291.8	287.7	286.7	284.6	282.1	281.6	279.0	279.5
5°	297.0	292.9	284.6	279.0	272.3	270.3	266.7	264.1	262.0	258.4	259.0
7.5°	295.9	289.8	278.5	267.7	256.9	249.2	238.4	229.7	222.5	214.8	216.3
10°	299.5	291.8	275.9	261.0	241.5	216.8	188.6	170.1	160.8	151.6	152.6
12.5°	306.7	297.5	276.9	254.3	214.8	172.6	133.6	108.4	101.7	97.6	98.1
15°	317.5	306.2	280.0	241.5	178.8	124.9	88.9	78.1	80.7	82.2	82.2
17.5°	328.8	316.0	282.6	218.4	138.2	87.3	72.4	71.4	75.0	78.6	78.6
20°	342.7	326.3	283.1	189.1	99.7	70.9	68.3	68.3	70.9	75.0	75.0
22.5°	356.1	337.6	278.5	155.7	76.0	65.8	65.8	65.8	67.3	71.4	71.9
25°	372.0	351.4	268.7	120.2	65.3	62.7	62.7	63.2	64.2	67.8	68.3
27.5°	388.9	365.8	252.3	87.9	59.6	59.1	59.6	60.1	60.6	64.2	65.3
30°	408.5	381.7	231.2	65.8	54.5	54.5	56.0	57.0	57.0	60.1	61.1
32.5°	431.1	402.8	206.0	54.5	49.3	48.8	51.4	52.9	52.9	55.5	56.5
35°	459.3	424.4	175.7	48.3	45.2	44.2	45.2	47.8	48.8	50.9	51.4
37.5°	496.8	450.1	143.3	44.7	42.1	40.1	40.1	40.6	42.6	44.7	45.2
40°	544.6	478.3	111.5	42.1	39.0	37.0	35.5	34.9	34.4	36.0	37.0
42.5°	604.7	510.2	83.2	39.6	36.5	33.4	31.3	29.3	26.7	26.2	26.7
45°	681.8	549.2	61.7	37.5	34.9	30.3	26.7	23.1	18.5	17.0	17.5
47.5°	772.7	589.8	48.3	35.5	33.9	26.7	22.1	15.9	11.3	10.3	10.8
50°	869.3	628.9	41.1	32.9	31.9	23.1	15.9	9.8	6.7	6.7	7.2
52.5°	951.5	651.0	37.5	30.8	28.8	19.0	10.3	5.7	4.1	4.1	4.6
55°	1031.2	662.8	34.9	28.8	24.7	13.4	5.7	3.6	2.6	2.6	2.6
57.5°	1113.4	667.9	31.9	26.2	19.5	8.2	3.1	2.1	1.5	1.5	1.5
60°	1186.3	658.2	27.2	21.6	12.8	4.1	1.5	1.5	1.0	0.5	0.5
62.5°	1247.5	639.7	19.0	15.4	7.7	2.1	1.0	0.5	0.0	0.0	0.0
65°	1285.0	609.9	12.3	10.3	4.6	1.5	0.5	0.0	0.0	0.0	0.0
67.5°	1274.2	553.9	7.7	6.7	2.1	1.0	0.5	0.0	0.0	0.0	0.0
70°	1149.9	454.2	5.7	4.1	1.5	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	828.7	307.2	4.1	2.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	398.7	109.4	2.6	2.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	97.6	24.1	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.6	4.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.2	2.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.5	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)