

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: P397560

Luminaire Tested: **ARCH-S-PA1-100-740-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397560  
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-PA1-100-740-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA 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: 8300 lumens  
Efficiency: N/A  
Efficacy: 86.5 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): 96  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

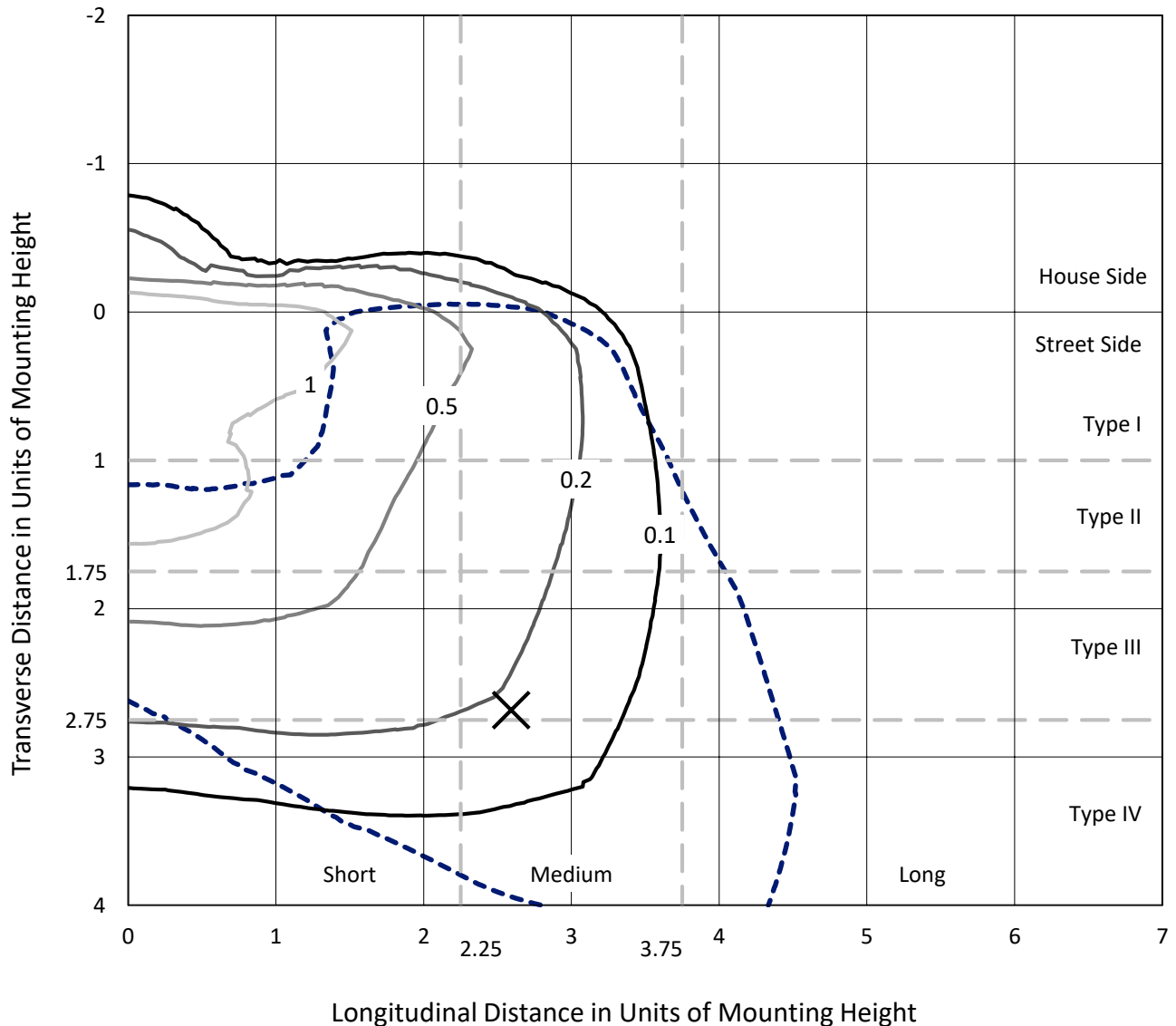


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

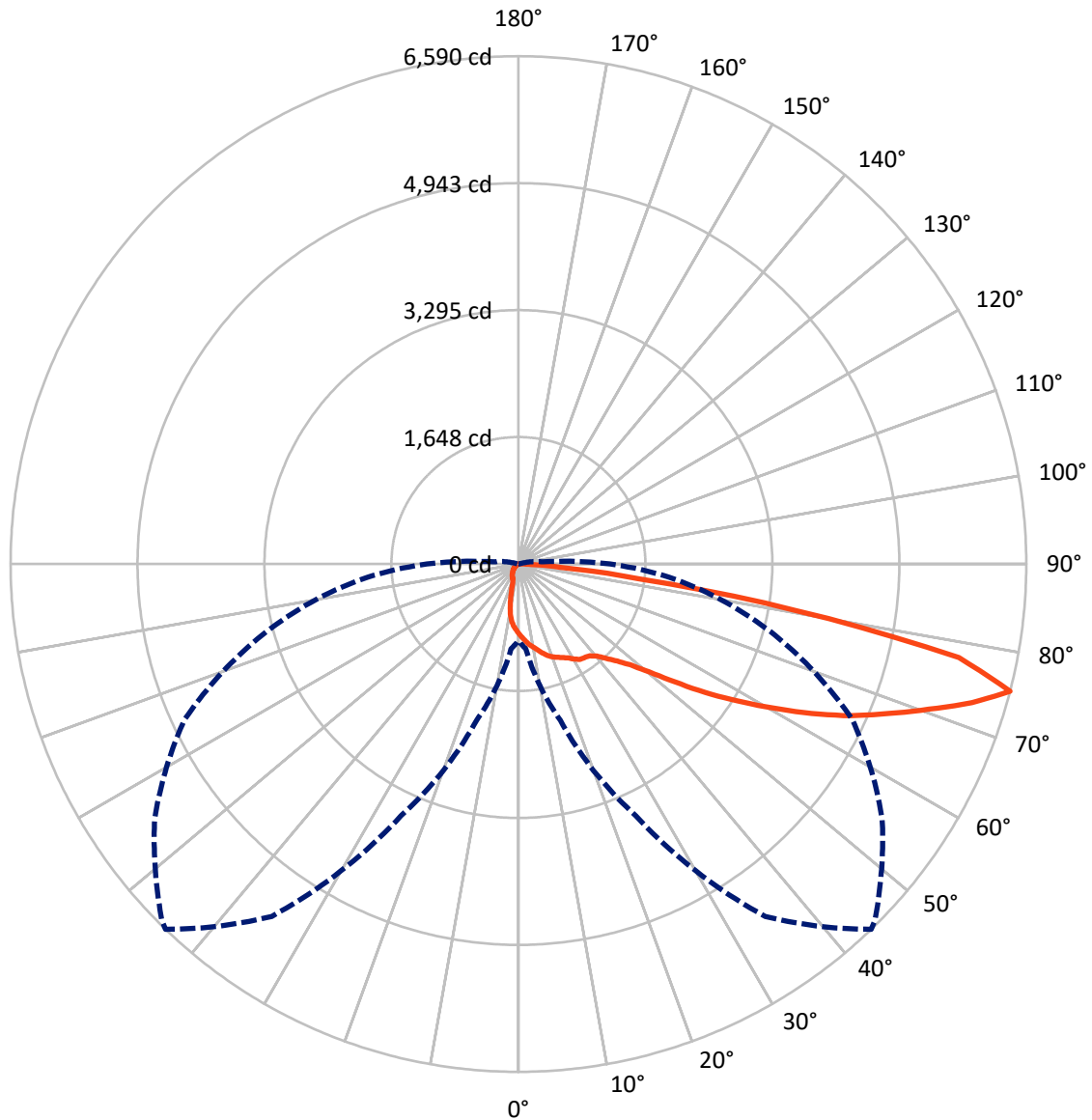


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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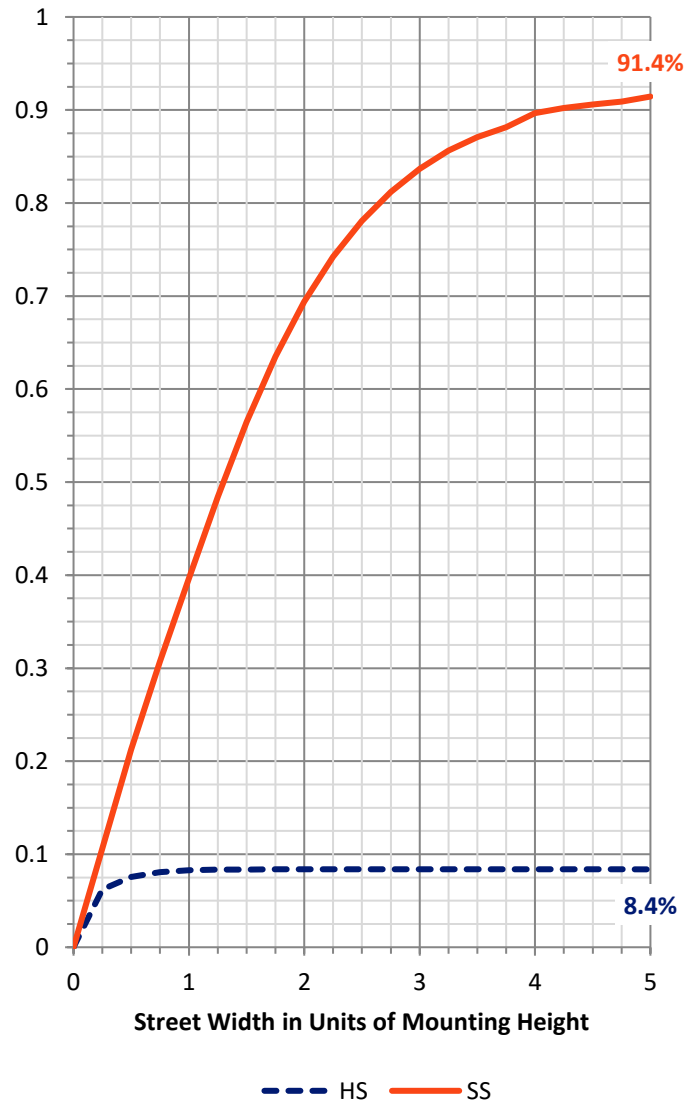
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	700.0	0.0	700.0
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	7600.0	0.0	7600.0
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	8300.0	0.0	8300.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	1.0
10°-20°	238.7	2.9
20°-30°	394.0	4.7
30°-40°	571.8	6.9
40°-50°	929.5	11.2
50°-60°	1638.7	19.7
60°-70°	2355.1	28.4
70°-80°	1885.9	22.7
80°-90°	200.9	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°	8300.0	100.0
0°-180°	8300.0	100.0



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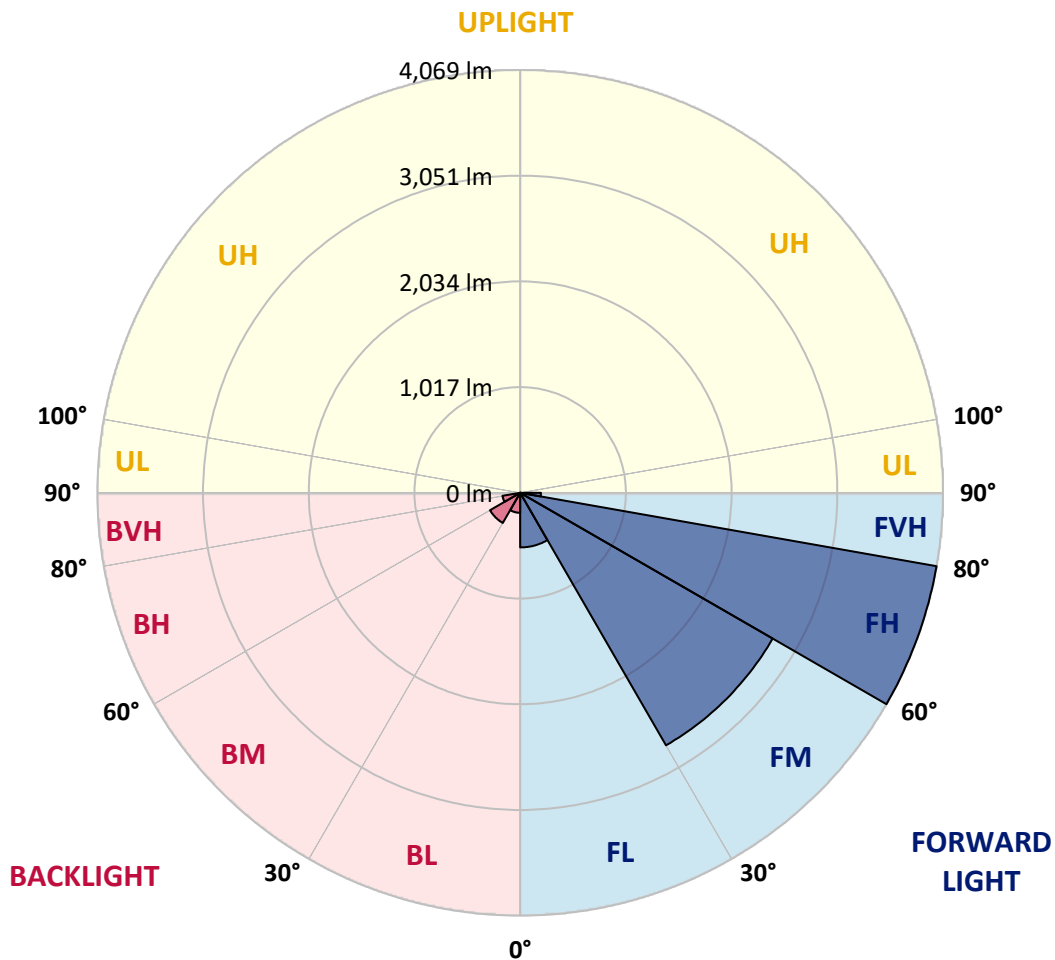
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	525.6	6.3			
FM	(30°-60°)	2805.5	33.8			
FH	(60°-80°)	4068.5	49.0			G2/5000
FVH	(80°-90°)	200.4	2.4			G2/225
BL	(0°-30°)	192.3	2.3	B1/500		
BM	(30°-60°)	334.6	4.0	B1/1000		
BH	(60°-80°)	172.6	2.1	B1/500		G1/500
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°	44°	45°	55°	65°	75°	85°
0°	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4
2.5°	984.6	983.0	978.5	970.8	963.1	955.5	954.0	941.7	927.9	917.2	908.0
5°	1071.9	1070.3	1062.7	1045.8	1029.0	1009.1	1007.5	978.5	952.4	923.3	898.8
7.5°	1162.2	1159.1	1145.4	1119.3	1090.2	1059.6	1056.5	1013.7	975.4	937.1	901.9
10°	1232.6	1229.6	1209.7	1179.0	1139.2	1101.0	1096.4	1052.0	1013.7	964.7	917.2
12.5°	1301.5	1295.4	1269.4	1235.7	1186.7	1150.0	1145.4	1099.4	1053.5	1003.0	944.8
15°	1365.9	1358.2	1333.7	1290.8	1238.8	1203.5	1200.5	1151.5	1104.0	1045.8	981.5
17.5°	1410.3	1407.2	1378.1	1330.6	1280.1	1251.0	1247.9	1197.4	1150.0	1088.7	1019.8
20°	1433.2	1433.2	1405.7	1353.6	1307.7	1287.8	1283.2	1235.7	1189.8	1131.6	1059.6
22.5°	1437.8	1442.4	1421.0	1364.3	1330.6	1313.8	1310.7	1269.4	1225.0	1171.4	1104.0
25°	1447.0	1447.0	1436.3	1375.0	1350.5	1345.9	1344.4	1307.7	1267.9	1214.3	1148.4
27.5°	1457.7	1457.7	1450.1	1390.4	1381.2	1379.6	1378.1	1361.3	1329.1	1266.3	1200.5
30°	1485.3	1486.8	1480.7	1421.0	1414.9	1431.7	1434.8	1425.6	1385.8	1307.7	1254.1
32.5°	1554.2	1540.4	1523.6	1442.4	1453.1	1474.6	1476.1	1457.7	1414.9	1352.1	1318.4
35°	1727.2	1646.1	1569.5	1460.8	1465.4	1486.8	1489.9	1488.4	1462.3	1408.7	1391.9
37.5°	1888.0	1773.2	1664.4	1503.7	1488.4	1511.3	1517.4	1543.5	1523.6	1486.8	1491.4
40°	1981.4	1937.0	1860.4	1621.6	1534.3	1569.5	1575.6	1615.4	1607.8	1592.5	1621.6
42.5°	2269.3	2272.3	2189.7	1797.7	1618.5	1675.2	1682.8	1715.0	1725.7	1733.3	1803.8
45°	2603.1	2613.8	2593.9	2114.6	1777.8	1796.1	1806.8	1849.7	1889.5	1938.5	2067.2
47.5°	3004.3	2995.1	2921.6	2502.0	2054.9	1952.3	1960.0	2042.7	2111.6	2218.7	2402.5
50°	3359.5	3382.5	3243.1	2863.4	2445.4	2198.8	2191.2	2272.3	2396.4	2546.4	2777.6
52.5°	3717.8	3684.1	3495.8	3221.7	2907.8	2534.2	2511.2	2555.6	2730.2	2907.8	3145.1
55°	3812.8	3815.8	3751.5	3613.7	3293.7	2941.5	2903.2	2900.1	3117.6	3238.5	3531.0
57.5°	3999.6	4007.2	4022.5	4050.1	3898.5	3348.8	3309.0	3266.1	3477.4	3547.9	3918.4
60°	4189.4	4198.6	4292.0	4440.6	4339.5	3788.3	3745.4	3644.3	3762.2	3857.2	4325.7
62.5°	4164.9	4229.2	4500.3	4795.8	4783.6	4270.6	4217.0	3973.5	4048.6	4131.2	4699.3
65°	3760.7	3829.6	4439.0	4893.8	5229.1	4746.8	4659.5	4313.5	4318.1	4417.6	5059.2
67.5°	3399.3	3474.4	4056.2	4852.5	5523.1	5174.0	5083.7	4654.9	4583.0	4748.3	5252.1
70°	3191.1	3266.1	3751.5	4723.8	5605.8	5647.2	5569.1	5045.4	4898.4	5050.0	5036.2
72.5°	2497.4	2615.3	3362.6	4478.8	5694.6	6154.0	6092.7	5540.0	5166.4	4734.6	3834.2
75°	995.3	1104.0	2099.3	3604.5	5582.9	6590.4	6542.9	5762.0	4782.0	3380.9	1963.0
77.5°	300.1	321.6	583.4	1782.3	4093.0	5843.2	5827.8	4844.8	3384.0	1569.5	535.9
80°	99.5	110.2	179.2	491.5	1868.1	3650.4	3719.3	3087.0	1537.4	359.8	108.7
82.5°	41.3	45.9	90.3	197.5	661.5	1572.6	1549.6	1382.7	535.9	223.6	39.8
85°	10.7	13.8	41.3	113.3	241.9	542.1	569.6	464.0	303.2	185.3	12.2
87.5°	0.0	0.0	19.9	45.9	108.7	163.8	171.5	140.9	171.5	139.3	6.1
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°	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4	903.4
2.5°	900.4	892.7	878.9	869.7	857.5	854.4	848.3	840.6	839.1	831.5	833.0
5°	885.0	872.8	848.3	831.5	811.5	805.4	794.7	787.1	780.9	770.2	771.7
7.5°	882.0	863.6	829.9	797.8	765.6	742.6	710.5	684.5	663.0	640.1	644.6
10°	892.7	869.7	822.3	777.9	719.7	646.2	562.0	506.8	479.3	451.7	454.8
12.5°	914.1	886.6	825.3	758.0	640.1	514.5	398.1	323.1	303.2	290.9	292.5
15°	946.3	912.6	834.5	719.7	532.9	372.1	264.9	232.7	240.4	245.0	245.0
17.5°	980.0	941.7	842.2	650.8	411.9	260.3	215.9	212.8	223.6	234.3	234.3
20°	1021.3	972.3	843.7	563.5	297.1	211.3	203.7	203.7	211.3	223.6	223.6
22.5°	1061.1	1006.0	829.9	464.0	226.6	196.0	196.0	196.0	200.6	212.8	214.4
25°	1108.6	1047.4	800.8	358.3	194.5	186.8	186.8	188.3	191.4	202.1	203.7
27.5°	1159.1	1090.2	751.8	261.8	177.6	176.1	177.6	179.2	180.7	191.4	194.5
30°	1217.3	1137.7	689.1	196.0	162.3	162.3	166.9	170.0	170.0	179.2	182.2
32.5°	1284.7	1200.5	614.0	162.3	147.0	145.5	153.1	157.7	157.7	165.4	168.4
35°	1368.9	1264.8	523.7	143.9	134.7	131.7	134.7	142.4	145.5	151.6	153.1
37.5°	1480.7	1341.4	427.2	133.2	125.6	119.4	119.4	121.0	127.1	133.2	134.7
40°	1623.1	1425.6	332.3	125.6	116.4	110.2	105.7	104.1	102.6	107.2	110.2
42.5°	1802.3	1520.5	248.1	117.9	108.7	99.5	93.4	87.3	79.6	78.1	79.6
45°	2031.9	1636.9	183.7	111.8	104.1	90.3	79.6	68.9	55.1	50.5	52.1
47.5°	2303.0	1757.8	143.9	105.7	101.1	79.6	65.8	47.5	33.7	30.6	32.2
50°	2590.8	1874.2	122.5	98.0	94.9	68.9	47.5	29.1	19.9	19.9	21.4
52.5°	2835.8	1940.1	111.8	91.9	85.7	56.7	30.6	16.8	12.2	12.2	13.8
55°	3073.2	1975.3	104.1	85.7	73.5	39.8	16.8	10.7	7.7	7.7	7.7
57.5°	3318.2	1990.6	94.9	78.1	58.2	24.5	9.2	6.1	4.6	4.6	4.6
60°	3535.6	1961.5	81.2	64.3	38.3	12.2	4.6	4.6	3.1	1.5	1.5
62.5°	3717.8	1906.4	56.7	45.9	23.0	6.1	3.1	1.5	0.0	0.0	0.0
65°	3829.6	1817.6	36.7	30.6	13.8	4.6	1.5	0.0	0.0	0.0	0.0
67.5°	3797.4	1650.7	23.0	19.9	6.1	3.1	1.5	0.0	0.0	0.0	0.0
70°	3426.9	1353.6	16.8	12.2	4.6	1.5	0.0	0.0	0.0	0.0	0.0
72.5°	2469.9	915.7	12.2	7.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1188.2	326.2	7.7	6.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	290.9	72.0	4.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	64.3	13.8	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.4	6.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	1.5	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)