

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: P800184

Luminaire Tested: **ARCH2-80-740-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-80-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 630mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7992 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.3
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: 24 FT

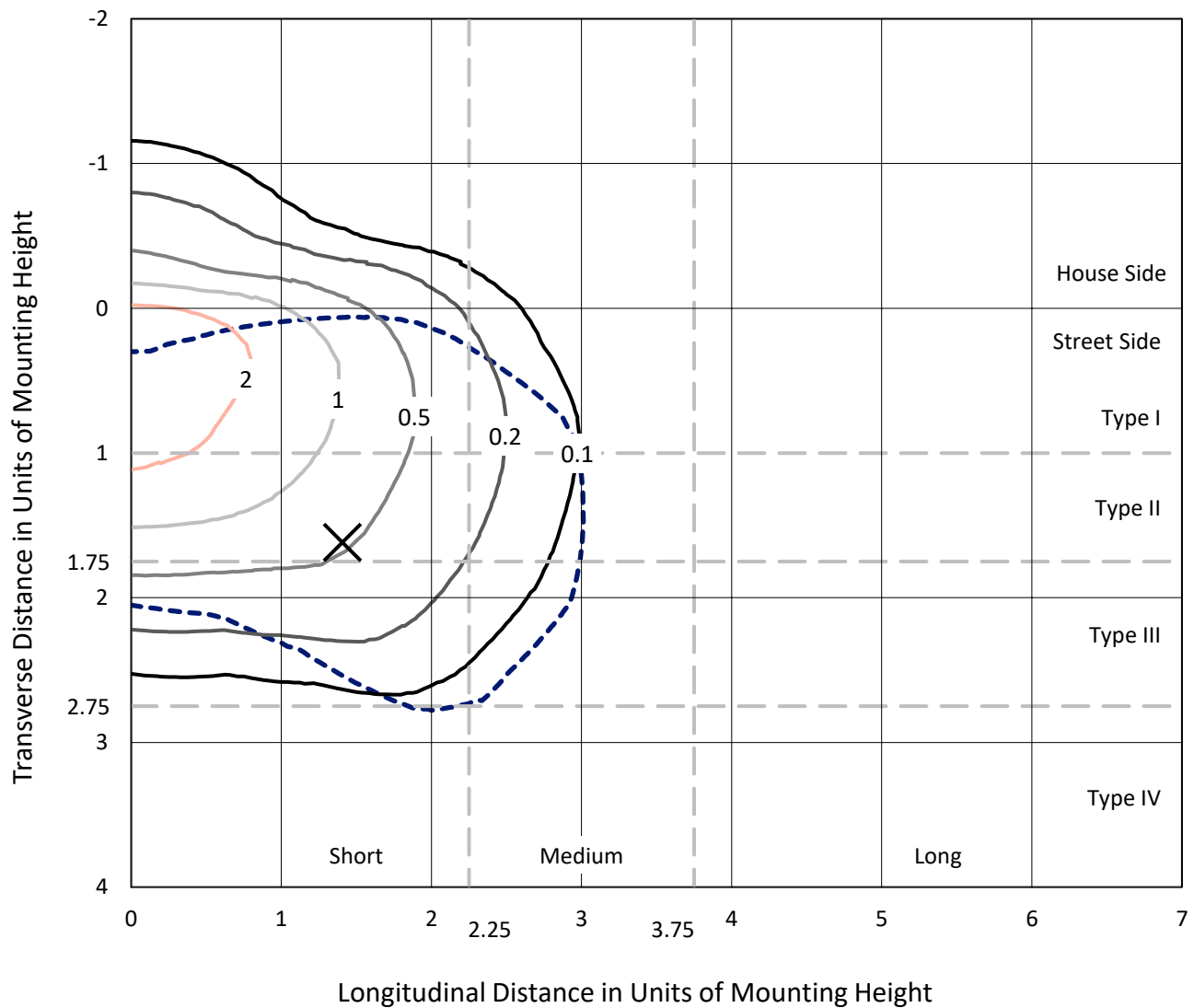


REPORT NUMBER: P800184

CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS

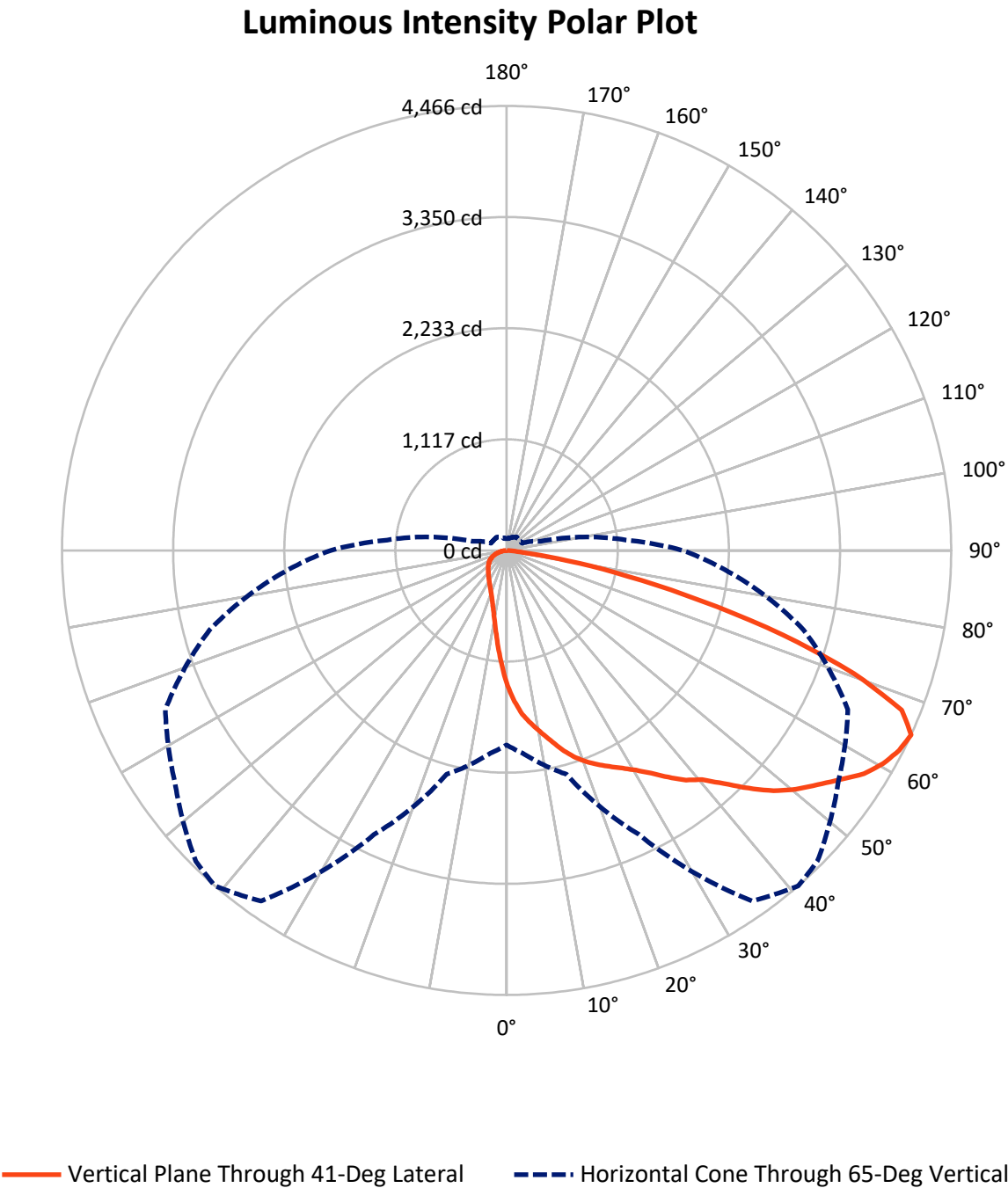
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type III - Short - N/A

REPORT NUMBER: P800184
CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS



REPORT NUMBER: P800184

CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS

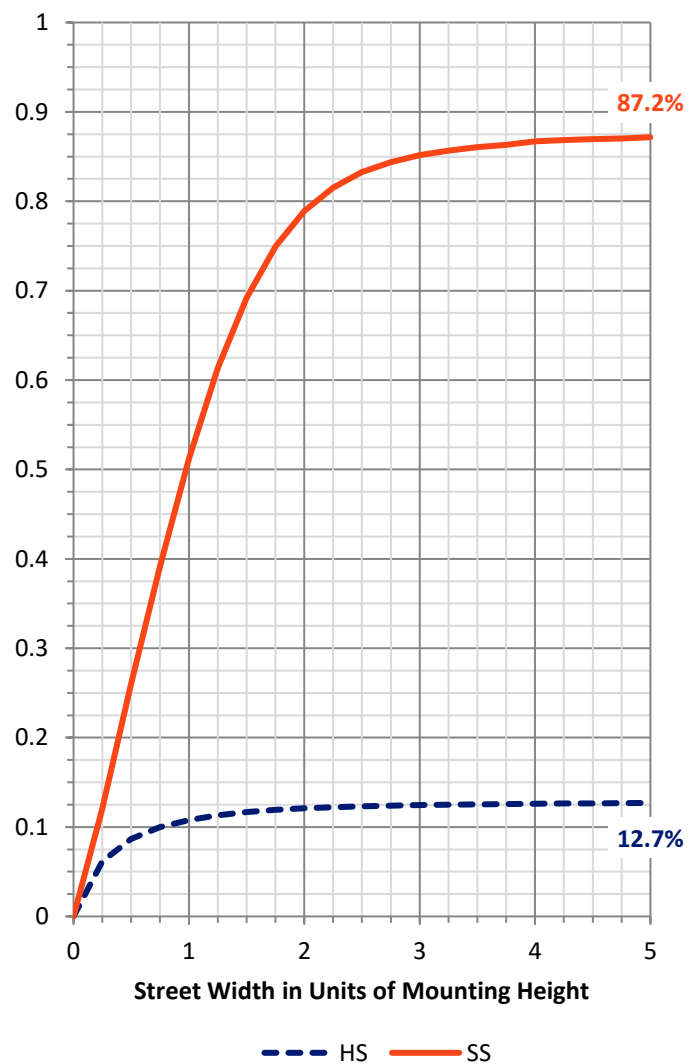
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1026.1	0.0	1026.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	6966.0	0.0	6966.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	7992.0	0.0	7992.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	1.6
10°-20°	380.5	4.8
20°-30°	654.5	8.2
30°-40°	992.7	12.4
40°-50°	1454.4	18.2
50°-60°	1836.5	23.0
60°-70°	1722.1	21.5
70°-80°	767.5	9.6
80°-90°	56.9	0.7
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°	7992.0	100.0
0°-180°	7992.0	100.0

Coefficient of Utilization



REPORT NUMBER: P800184

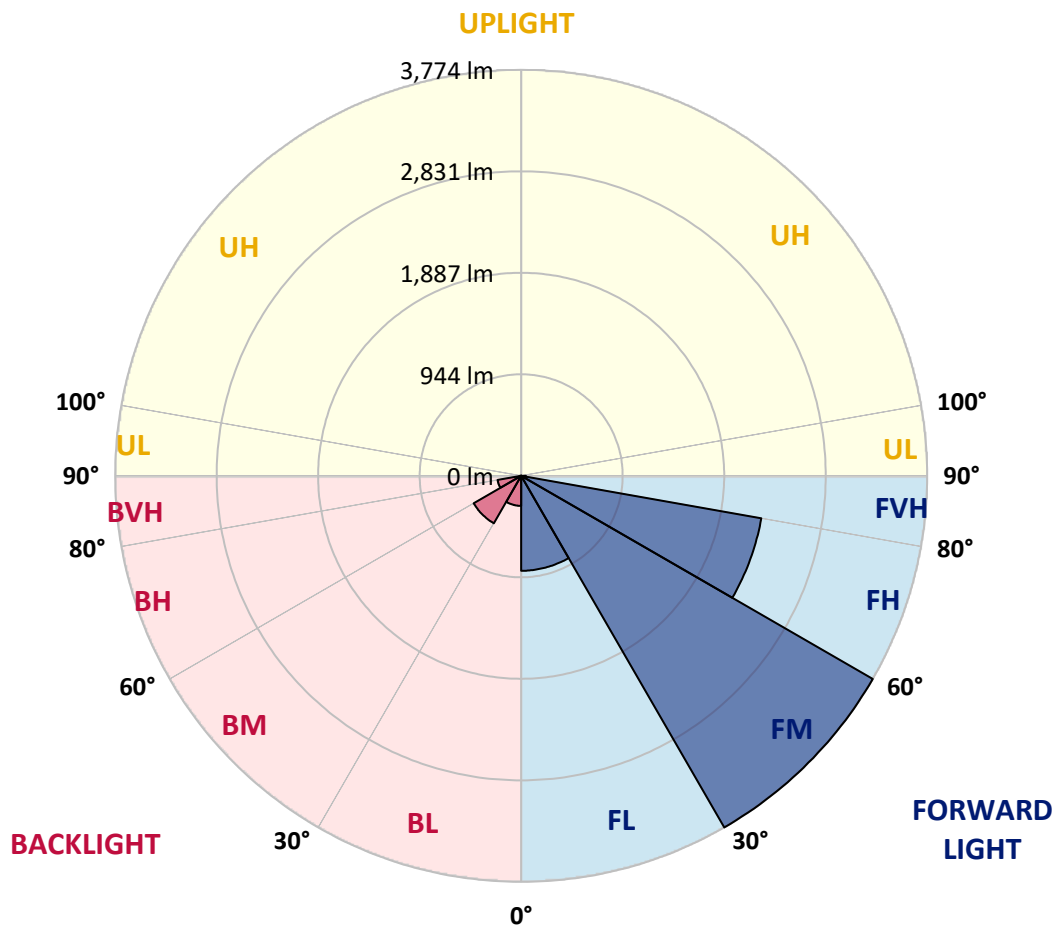
CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	882.6	11.0			
FM	(30°-60°)	3774.1	47.2			
FH	(60°-80°)	2266.7	28.4			G2/5000
FVH	(80°-90°)	42.5	0.5			G1/100
BL	(0°-30°)	279.3	3.5	B1/500		
BM	(30°-60°)	509.5	6.4	B1/1000		
BH	(60°-80°)	222.9	2.8	B1/500		G1/500
BVH	(80°-90°)	14.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



REPORT NUMBER: P800184

CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8
2.5°	1570.8	1565.7	1562.4	1543.8	1543.8	1518.5	1520.2	1496.6	1468.0	1422.5	1373.6
5°	1719.1	1712.4	1703.9	1685.4	1678.6	1653.4	1650.0	1616.3	1567.4	1488.2	1400.6
7.5°	1848.9	1842.1	1830.3	1803.4	1784.8	1754.5	1746.1	1702.2	1648.3	1550.6	1427.5
10°	1966.8	1961.8	1946.6	1912.9	1887.6	1850.6	1835.4	1776.4	1709.0	1601.1	1449.4
12.5°	2086.5	2079.8	2059.5	2030.9	2000.6	1956.7	1938.2	1862.4	1776.4	1656.7	1481.5
15°	2197.7	2187.6	2172.5	2142.1	2115.2	2073.0	2052.8	1963.5	1859.0	1719.1	1523.6
17.5°	2270.2	2261.8	2248.3	2231.5	2209.5	2177.5	2157.3	2069.7	1941.6	1779.8	1567.4
20°	2314.0	2310.7	2305.6	2295.5	2285.4	2263.5	2248.3	2165.7	2030.9	1838.8	1609.5
22.5°	2347.7	2344.4	2342.7	2342.7	2344.4	2336.0	2325.8	2255.1	2116.8	1901.1	1648.3
25°	2400.0	2398.3	2394.9	2391.6	2403.4	2405.1	2401.7	2352.8	2224.7	1983.7	1697.2
27.5°	2472.5	2467.4	2460.7	2457.3	2469.1	2477.5	2484.3	2450.6	2339.3	2068.0	1752.8
30°	2583.7	2568.5	2551.7	2539.9	2548.3	2561.8	2577.0	2556.7	2457.3	2172.5	1810.1
32.5°	2715.2	2696.6	2657.9	2635.9	2657.9	2668.0	2679.8	2669.7	2580.3	2285.4	1867.4
35°	2875.3	2853.4	2812.9	2780.9	2819.7	2797.7	2792.7	2782.6	2696.6	2396.6	1931.5
37.5°	3141.6	3109.5	3045.5	2974.7	2974.7	2927.5	2909.0	2878.6	2801.1	2496.1	1993.8
40°	3450.0	3407.9	3325.3	3220.8	3124.7	3027.0	3015.2	2993.3	2924.2	2610.7	2064.6
42.5°	3788.8	3707.9	3593.3	3466.8	3311.8	3200.6	3173.6	3111.2	3043.8	2727.0	2135.4
45°	4164.6	3996.1	3829.2	3765.2	3509.0	3407.9	3357.3	3244.4	3168.5	2848.3	2209.5
47.5°	4225.3	4093.8	3982.6	3972.5	3692.7	3608.4	3551.1	3389.3	3303.4	2978.1	2287.1
50°	4191.6	4112.4	4124.1	4083.7	3827.5	3771.9	3728.1	3544.4	3436.5	3102.8	2357.9
52.5°	4050.0	4093.8	4161.2	4087.1	3955.6	3910.1	3888.2	3711.2	3561.2	3217.4	2421.9
55°	3881.5	3911.8	4056.7	4147.7	4103.9	4063.5	4043.3	3905.0	3684.3	3313.5	2480.9
57.5°	3635.4	3621.9	3782.0	4137.6	4259.0	4235.4	4213.5	4095.5	3798.9	3382.6	2518.0
60°	3266.3	3237.6	3439.9	3935.4	4309.5	4346.6	4336.5	4221.9	3886.5	3380.9	2502.8
62.5°	2627.5	2698.3	2978.1	3605.0	4331.5	4425.8	4407.3	4232.0	3915.2	3283.1	2406.7
65°	1953.4	2054.5	2329.2	3150.0	4301.1	4466.3	4415.7	4066.8	3782.0	3089.3	2196.1
67.5°	1407.3	1496.6	1697.2	2592.1	4009.5	4280.9	4221.9	3797.2	3475.3	2814.6	1904.5
70°	962.4	1026.4	1162.9	1887.6	3423.0	3701.1	3664.0	3394.4	2991.6	2487.6	1547.2
72.5°	679.2	706.2	793.8	1245.5	2600.6	2903.9	2860.1	2792.7	2403.4	2068.0	1203.4
75°	509.0	525.8	573.0	805.6	1754.5	2012.4	1971.9	2010.7	1794.9	1565.7	876.4
77.5°	192.1	209.0	325.3	514.0	1038.2	1235.4	1194.9	1218.5	997.8	790.4	436.5
80°	52.2	55.6	107.9	244.4	471.9	615.2	559.5	480.3	370.8	364.0	230.9
82.5°	21.9	25.3	48.9	131.5	168.5	168.5	141.6	175.3	141.6	170.2	111.2
85°	8.4	10.1	11.8	33.7	21.9	23.6	25.3	33.7	28.7	35.4	25.3
87.5°	0.0	0.0	0.0	1.7	1.7	3.4	1.7	3.4	5.1	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P800184

CATALOG NUMBER: ARCH2-80-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8	1361.8
2.5°	1353.4	1334.8	1307.9	1264.0	1218.5	1193.3	1161.2	1156.2	1122.5	1119.1	1105.6
5°	1361.8	1323.0	1253.9	1169.7	1087.1	1023.0	975.8	950.6	901.7	901.7	888.2
7.5°	1368.5	1307.9	1196.6	1071.9	959.0	873.0	809.0	782.0	738.2	734.8	724.7
10°	1370.2	1289.3	1134.3	972.5	834.3	746.6	684.3	653.9	615.2	611.8	605.1
12.5°	1383.7	1279.2	1078.6	886.5	744.9	650.6	589.9	564.6	534.3	530.9	524.2
15°	1405.6	1279.2	1031.5	814.0	665.7	578.1	525.8	502.2	480.3	477.0	473.6
17.5°	1427.5	1275.8	984.3	746.6	600.0	520.8	475.3	456.7	439.9	438.2	434.8
20°	1447.7	1274.2	937.1	689.3	549.4	473.6	438.2	421.3	407.9	407.9	406.2
22.5°	1468.0	1270.8	891.6	635.4	505.6	438.2	407.9	389.3	379.2	379.2	377.5
25°	1498.3	1270.8	849.4	589.9	470.2	411.2	380.9	367.4	359.0	357.3	357.3
27.5°	1533.7	1280.9	812.4	549.4	439.9	384.3	360.7	347.2	337.1	333.7	335.4
30°	1572.5	1289.3	778.7	514.0	411.2	364.0	338.8	325.3	315.2	311.8	313.5
32.5°	1611.2	1299.4	748.3	482.0	382.6	345.5	320.2	305.1	294.9	293.3	293.3
35°	1653.4	1309.5	718.0	455.1	359.0	327.0	303.4	286.5	279.8	276.4	278.1
37.5°	1695.5	1326.4	689.3	429.8	342.1	310.1	288.2	271.3	266.3	264.6	264.6
40°	1746.1	1351.7	677.5	412.9	327.0	294.9	276.4	259.6	254.5	254.5	254.5
42.5°	1788.2	1371.9	667.4	394.4	315.2	281.5	264.6	251.1	247.8	246.1	247.8
45°	1830.3	1390.4	653.9	377.5	300.0	268.0	254.5	241.0	237.6	237.6	237.6
47.5°	1872.5	1400.6	635.4	360.7	286.5	256.2	244.4	232.6	229.2	229.2	229.2
50°	1906.2	1409.0	608.4	342.1	271.3	246.1	234.3	222.5	219.1	219.1	219.1
52.5°	1939.9	1410.7	579.8	320.2	256.2	234.3	224.2	212.4	209.0	207.3	207.3
55°	1970.2	1409.0	546.1	294.9	239.3	220.8	212.4	202.2	195.5	188.8	192.1
57.5°	1992.1	1407.3	507.3	269.7	222.5	207.3	203.9	190.4	177.0	160.1	163.5
60°	1983.7	1388.8	465.2	237.6	203.9	193.8	193.8	175.3	151.7	143.3	144.9
62.5°	1929.8	1336.5	421.3	203.9	185.4	180.3	178.7	158.4	139.9	131.5	133.1
65°	1768.0	1205.1	357.3	173.6	166.9	165.2	165.2	146.6	129.8	119.7	121.3
67.5°	1521.9	1011.2	291.6	146.6	148.3	151.7	151.7	134.8	118.0	107.9	109.6
70°	1220.2	790.4	232.6	126.4	128.1	133.1	136.5	121.3	106.2	96.1	96.1
72.5°	918.5	600.0	187.1	106.2	114.6	114.6	119.7	107.9	92.7	82.6	84.3
75°	665.7	429.8	148.3	89.3	99.4	97.8	97.8	91.0	79.2	72.5	72.5
77.5°	315.2	225.8	118.0	64.0	77.5	75.8	77.5	72.5	67.4	60.7	62.4
80°	155.1	111.2	75.8	45.5	53.9	55.6	60.7	57.3	55.6	50.6	50.6
82.5°	74.2	43.8	35.4	32.0	37.1	38.8	42.1	42.1	43.8	40.4	40.4
85°	20.2	11.8	15.2	20.2	23.6	25.3	28.7	30.3	30.3	28.7	30.3
87.5°	5.1	5.1	6.7	10.1	11.8	13.5	15.2	15.2	6.7	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)