

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: P257855

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257855
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-130-D-U-T2U-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 845mA LIGHT ENGINES 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: 11501 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 131
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

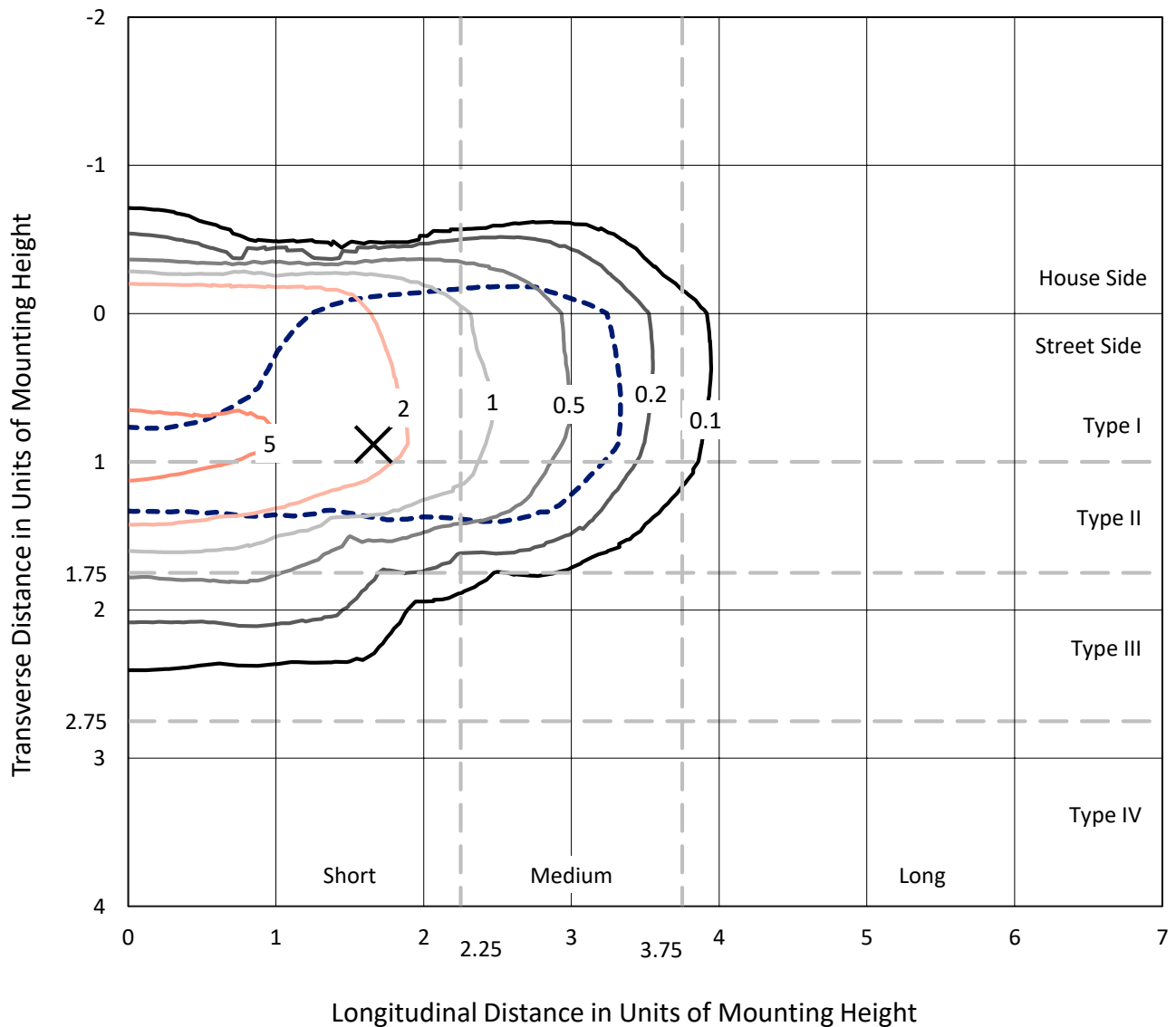


REPORT NUMBER: P257855

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

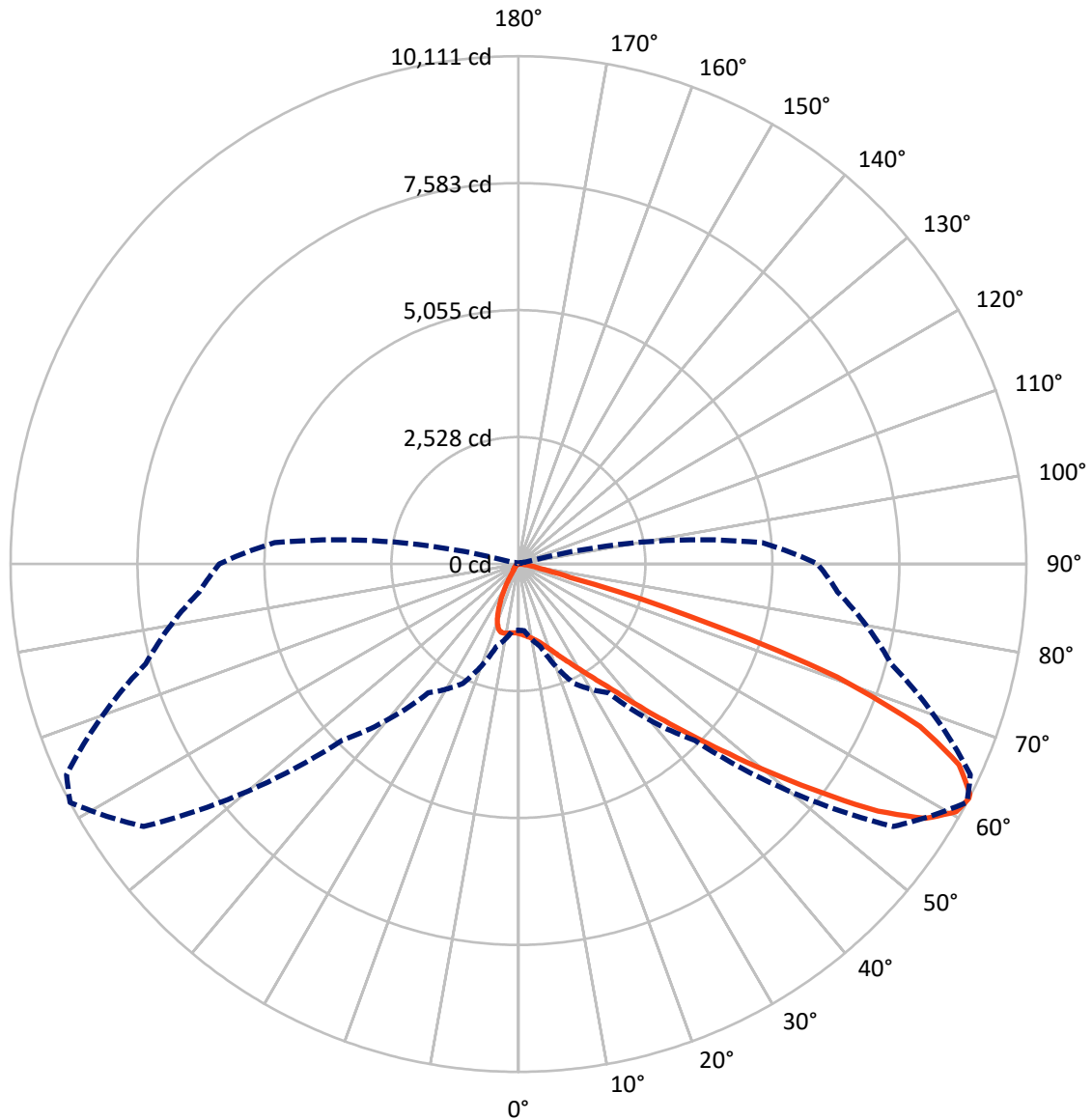


Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P257855

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P257855

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

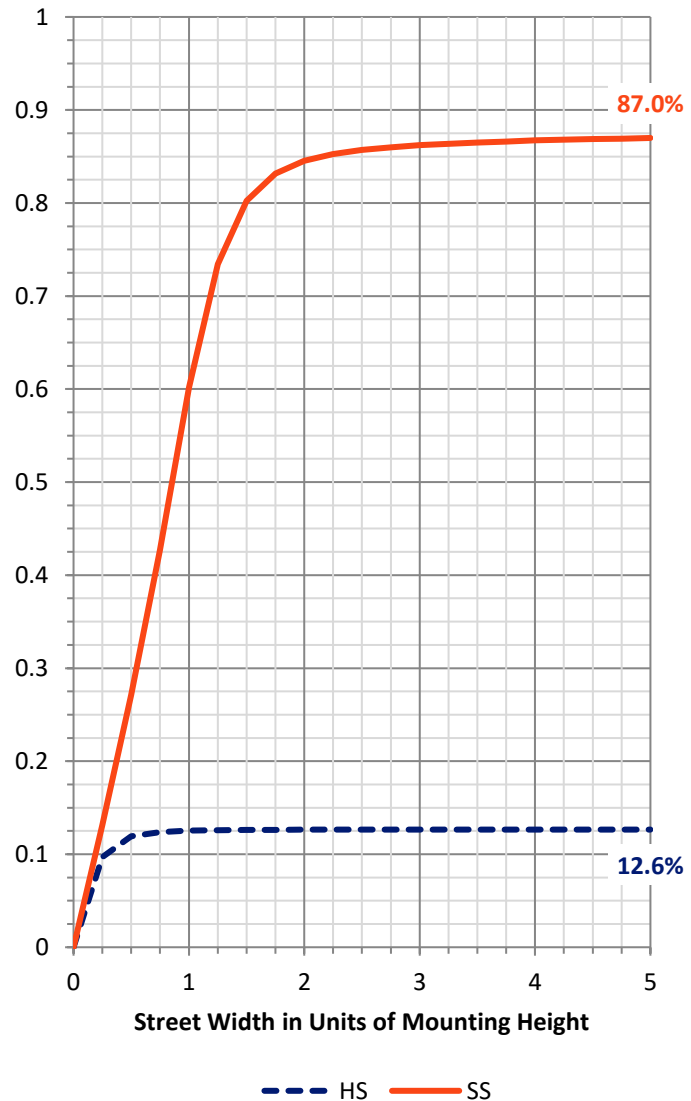
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1470.6	0.0	1470.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	10030.5	0.0	10030.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	11501.0	0.0	11501.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	1.2
10°-20°	372.3	3.2
20°-30°	625.3	5.4
30°-40°	1198.7	10.4
40°-50°	2448.3	21.3
50°-60°	3239.9	28.2
60°-70°	2516.9	21.9
70°-80°	908.5	7.9
80°-90°	57.9	0.5
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°	11501.0	100.0
0°-180°	11501.0	100.0



REPORT NUMBER: P257855

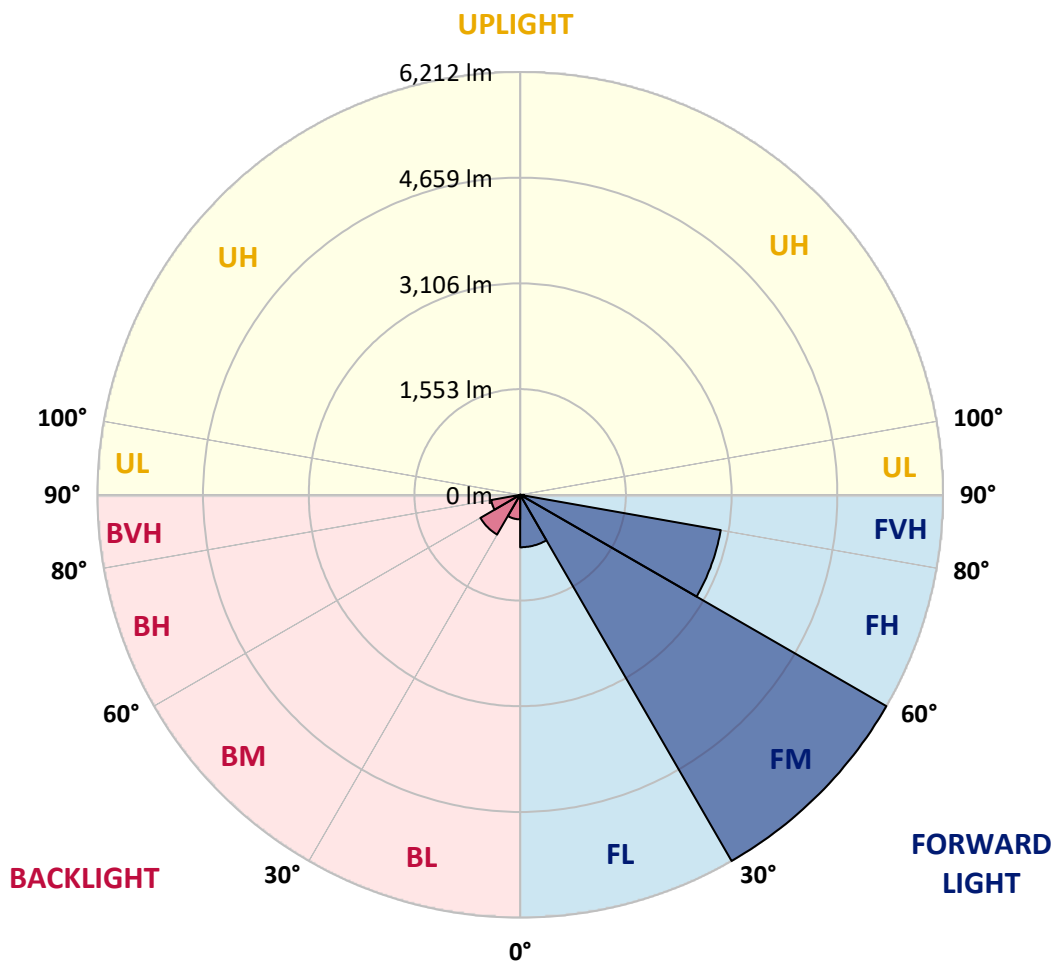
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	771.0	6.7			
FM	(30°-60°)	6211.7	54.0			
FH	(60°-80°)	2992.3	26.0			G2/5000
FVH	(80°-90°)	55.4	0.5			G1/100
BL	(0°-30°)	359.9	3.1	B1/500		
BM	(30°-60°)	675.1	5.9	B1/1000		
BH	(60°-80°)	433.0	3.8	B1/500		G1/500
BVH	(80°-90°)	2.5	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 II Short





REPORT NUMBER: P257855

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5
2.5°	1422.2	1419.3	1416.6	1413.7	1413.7	1410.9	1408.1	1402.4	1396.7	1391.1	1388.2
5°	1447.7	1444.8	1442.0	1444.8	1442.0	1442.0	1439.2	1433.6	1427.8	1419.3	1410.9
7.5°	1467.4	1464.7	1461.8	1464.7	1467.4	1470.3	1473.2	1467.4	1464.7	1453.3	1444.8
10°	1492.9	1490.0	1487.3	1492.9	1492.9	1507.0	1509.9	1507.0	1504.2	1495.8	1481.5
12.5°	1529.6	1532.5	1532.5	1538.1	1543.8	1560.7	1566.4	1558.0	1558.0	1546.6	1529.6
15°	1597.5	1597.5	1597.5	1603.2	1606.0	1628.6	1634.3	1625.8	1631.4	1611.7	1594.7
17.5°	1662.5	1665.4	1671.0	1682.3	1682.3	1702.1	1713.4	1713.4	1724.7	1699.3	1676.7
20°	1727.6	1730.4	1738.9	1764.3	1764.3	1789.8	1809.6	1818.1	1829.3	1803.9	1764.3
22.5°	1798.2	1798.2	1812.4	1852.0	1843.5	1894.4	1931.1	1945.2	1956.6	1922.6	1860.4
25°	1905.7	1894.4	1905.7	1942.5	1936.8	2007.4	2075.4	2089.5	2103.6	2064.0	1970.7
27.5°	2109.3	2092.3	2052.8	2055.5	2055.5	2137.6	2233.7	2253.5	2261.9	2228.0	2112.1
30°	2516.5	2516.5	2369.4	2270.4	2205.4	2278.9	2414.7	2448.5	2459.9	2408.9	2256.3
32.5°	3226.1	3226.1	2954.7	2703.0	2457.0	2457.0	2612.5	2674.8	2686.1	2626.7	2448.5
35°	4130.9	4125.3	3718.1	3373.2	2892.5	2711.5	2844.4	2949.1	2982.9	2903.7	2697.4
37.5°	5092.2	5055.5	4617.2	4221.4	3562.6	3118.7	3158.3	3296.8	3327.9	3262.9	3019.8
40°	5872.7	5830.2	5476.8	5146.0	4427.7	3769.0	3610.6	3737.9	3774.7	3684.2	3404.3
42.5°	6579.5	6474.9	6231.7	5994.2	5423.1	4894.3	4212.9	4263.8	4303.3	4207.2	3836.9
45°	7091.2	6930.1	6805.7	6732.1	6429.7	6129.9	4993.2	4891.4	4905.7	4786.9	4309.1
47.5°	7105.4	6992.3	7003.6	7195.8	7320.2	7309.0	6008.3	5646.4	5592.7	5394.7	4812.3
50°	6426.8	6491.9	6698.2	7246.8	7919.7	8326.8	7215.7	6539.9	6378.7	6022.4	5312.8
52.5°	5295.8	5397.6	5785.0	6709.5	8007.4	8997.0	8468.2	7560.6	7272.2	6644.5	5697.3
55°	4147.9	4153.5	4560.7	5502.2	7422.0	9118.5	9469.1	8683.1	8242.0	7116.7	5951.7
57.5°	2852.9	3008.4	3525.8	4159.2	6101.6	8513.4	9845.2	9554.0	8985.6	7407.9	6129.9
60°	1868.9	1877.4	2479.6	3212.0	4153.5	6927.2	9616.1	10014.8	9587.9	7580.4	6251.5
62°	1317.6	1331.7	1705.0	2623.9	3130.0	4965.0	9110.0	10110.9	9927.1	7682.2	6378.7
62.5°	1221.5	1232.8	1546.6	2476.9	2940.6	4453.2	8929.1	10088.3	9978.1	7716.1	6423.9
65°	896.3	896.3	1012.2	1702.1	2154.5	2406.2	7566.3	9638.8	9910.2	7987.5	6593.6
67.5°	692.7	698.4	738.0	1048.9	1625.8	1458.9	4829.2	8626.5	9203.4	8389.0	6689.8
70°	596.6	593.7	622.1	695.5	1173.4	969.9	2126.2	6732.1	7707.6	8287.2	6602.1
72.5°	441.1	443.9	508.9	610.7	817.1	630.5	961.4	3573.9	4999.0	6486.1	5657.7
75°	282.7	285.6	359.1	480.7	588.1	412.8	554.1	1065.9	2047.0	3596.5	3460.8
77.5°	189.5	195.1	234.7	336.4	514.6	257.3	347.8	446.7	616.4	1348.7	1241.2
80°	127.3	127.3	149.9	226.2	325.2	214.9	186.6	296.9	319.5	418.5	209.2
82.5°	84.8	84.8	98.9	149.9	212.1	192.3	113.1	161.1	186.6	209.2	73.6
85°	50.9	50.9	67.8	93.3	138.5	107.4	73.6	90.4	96.2	132.9	39.6
87.5°	31.1	28.2	45.2	65.1	73.6	65.1	48.1	48.1	50.9	73.6	19.7
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: P257855

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5
2.5°	1382.6	1379.8	1377.0	1371.3	1362.9	1357.1	1351.5	1345.9	1340.2	1340.2	1348.7
5°	1408.1	1399.6	1388.2	1377.0	1360.0	1348.7	1340.2	1328.9	1323.3	1323.3	1326.1
7.5°	1439.2	1430.7	1410.9	1391.1	1365.6	1345.9	1326.1	1300.6	1280.8	1272.3	1280.8
10°	1473.2	1461.8	1433.6	1402.4	1374.1	1323.3	1258.2	1179.1	1111.2	1080.1	1094.3
12.5°	1515.5	1501.4	1467.4	1425.1	1360.0	1235.6	1074.4	890.7	774.7	721.0	732.3
15°	1577.7	1558.0	1509.9	1444.8	1300.6	1032.1	769.1	557.0	449.6	404.4	410.0
17.5°	1651.2	1625.8	1560.7	1439.2	1148.0	743.6	458.1	325.2	279.9	268.6	268.6
20°	1730.4	1696.5	1611.7	1396.7	916.1	466.6	285.6	248.8	231.8	223.4	223.4
22.5°	1812.4	1767.1	1654.0	1297.8	653.2	291.2	234.7	209.2	189.5	181.0	181.0
25°	1911.4	1852.0	1696.5	1125.3	415.6	234.7	200.7	175.3	155.5	144.2	147.0
27.5°	2027.3	1951.0	1733.2	910.4	268.6	203.6	166.8	141.4	124.4	118.8	118.8
30°	2148.8	2058.4	1741.7	681.4	217.7	175.3	138.5	115.9	104.6	98.9	98.9
32.5°	2315.7	2196.9	1716.3	452.3	183.8	147.0	115.9	96.2	87.7	84.8	84.8
35°	2536.2	2377.8	1656.9	279.9	155.5	121.6	96.2	84.8	76.3	73.6	73.6
37.5°	2816.2	2629.5	1552.2	192.3	132.9	98.9	82.0	73.6	67.8	65.1	65.1
40°	3189.4	2934.8	1416.6	166.8	113.1	84.8	70.7	65.1	59.3	59.3	59.3
42.5°	3585.2	3305.3	1241.2	147.0	96.2	73.6	62.2	56.6	53.7	50.9	50.9
45°	4017.8	3684.2	1023.6	130.0	82.0	65.1	56.6	48.1	45.2	45.2	45.2
47.5°	4447.6	4074.3	786.0	113.1	70.7	56.6	48.1	42.5	39.6	36.7	36.7
50°	4888.7	4427.7	576.8	98.9	62.2	50.9	42.5	36.7	31.1	28.2	28.2
52.5°	5208.1	4639.8	421.3	84.8	53.7	42.5	34.0	28.2	22.6	19.7	19.7
55°	5442.8	4769.9	308.2	70.7	48.1	36.7	28.2	22.6	17.0	17.0	14.1
57.5°	5626.6	4832.1	231.8	62.2	42.5	31.1	22.6	17.0	14.1	11.4	11.4
60°	5768.0	4835.0	172.5	50.9	36.7	25.5	17.0	11.4	8.5	8.5	8.5
62°	5954.6	4871.7	141.4	42.5	34.0	22.6	14.1	8.5	5.6	2.9	2.9
62.5°	6008.3	4885.8	135.7	42.5	31.1	19.7	11.4	8.5	5.6	2.9	2.9
65°	6257.2	4911.3	104.6	34.0	25.5	17.0	8.5	5.6	0.0	0.0	0.0
67.5°	6483.4	4871.7	76.3	25.5	19.7	11.4	8.5	2.9	0.0	0.0	0.0
70°	6460.8	4600.2	53.7	17.0	14.1	8.5	5.6	0.0	0.0	0.0	0.0
72.5°	5324.0	3443.9	36.7	14.1	8.5	5.6	2.9	0.0	0.0	0.0	0.0
75°	3214.8	1507.0	25.5	8.5	8.5	5.6	2.9	0.0	0.0	0.0	0.0
77.5°	1054.7	545.7	17.0	5.6	5.6	2.9	2.9	0.0	0.0	0.0	0.0
80°	172.5	90.4	8.5	5.6	5.6	2.9	2.9	0.0	0.0	0.0	0.0
82.5°	53.7	22.6	5.6	5.6	2.9	2.9	0.0	0.0	0.0	0.0	0.0
85°	19.7	8.5	5.6	5.6	2.9	2.9	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	5.6	5.6	5.6	2.9	2.9	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)