

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: P258188

Luminaire Tested: **ARCH-M-AF48-150-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258188
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-AF48-150-D-U-T2U-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 970mA 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: 12006.5 lumens
Efficiency: N/A
Efficacy: 79.5 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

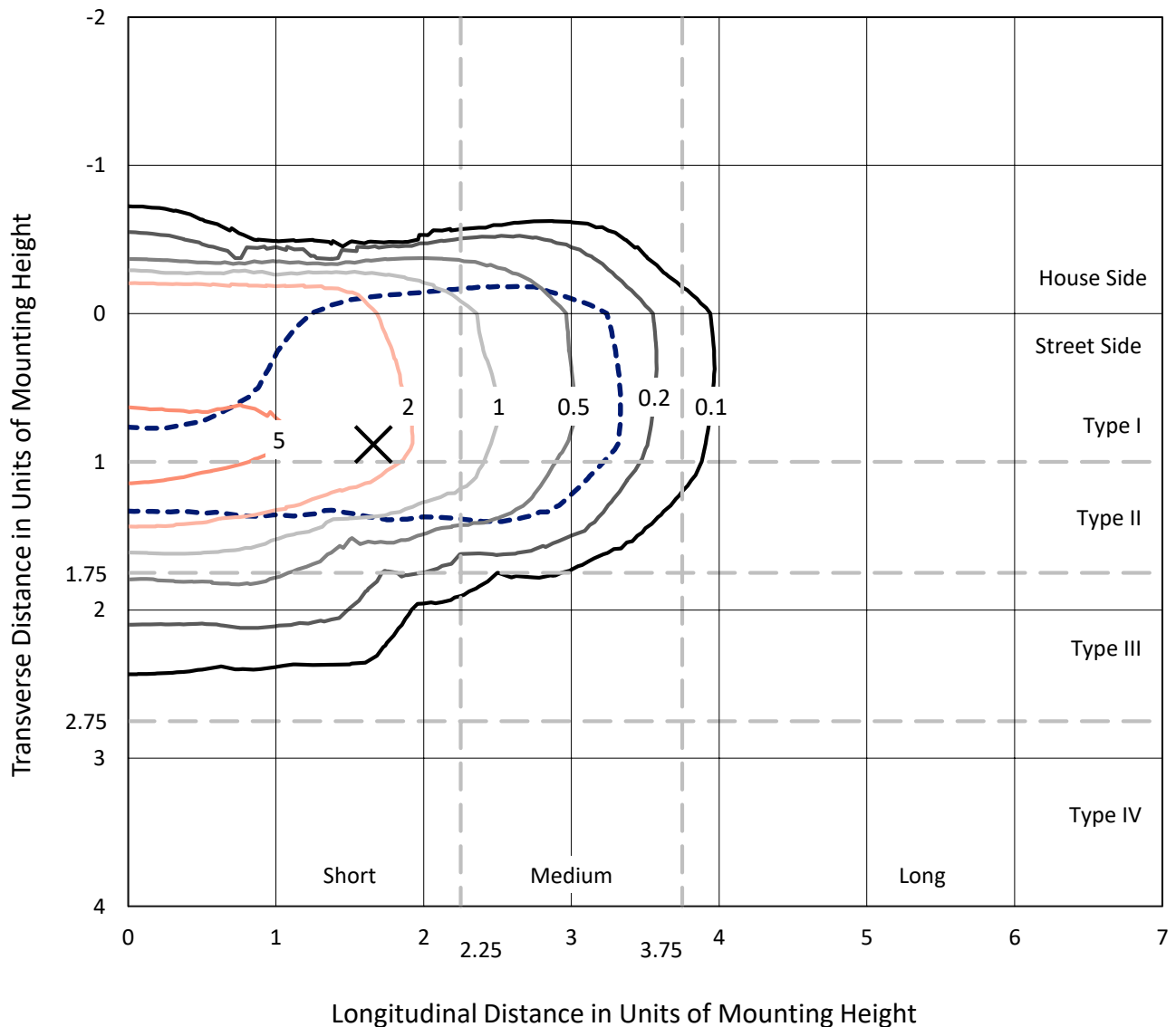
Input Watts (W): 151
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

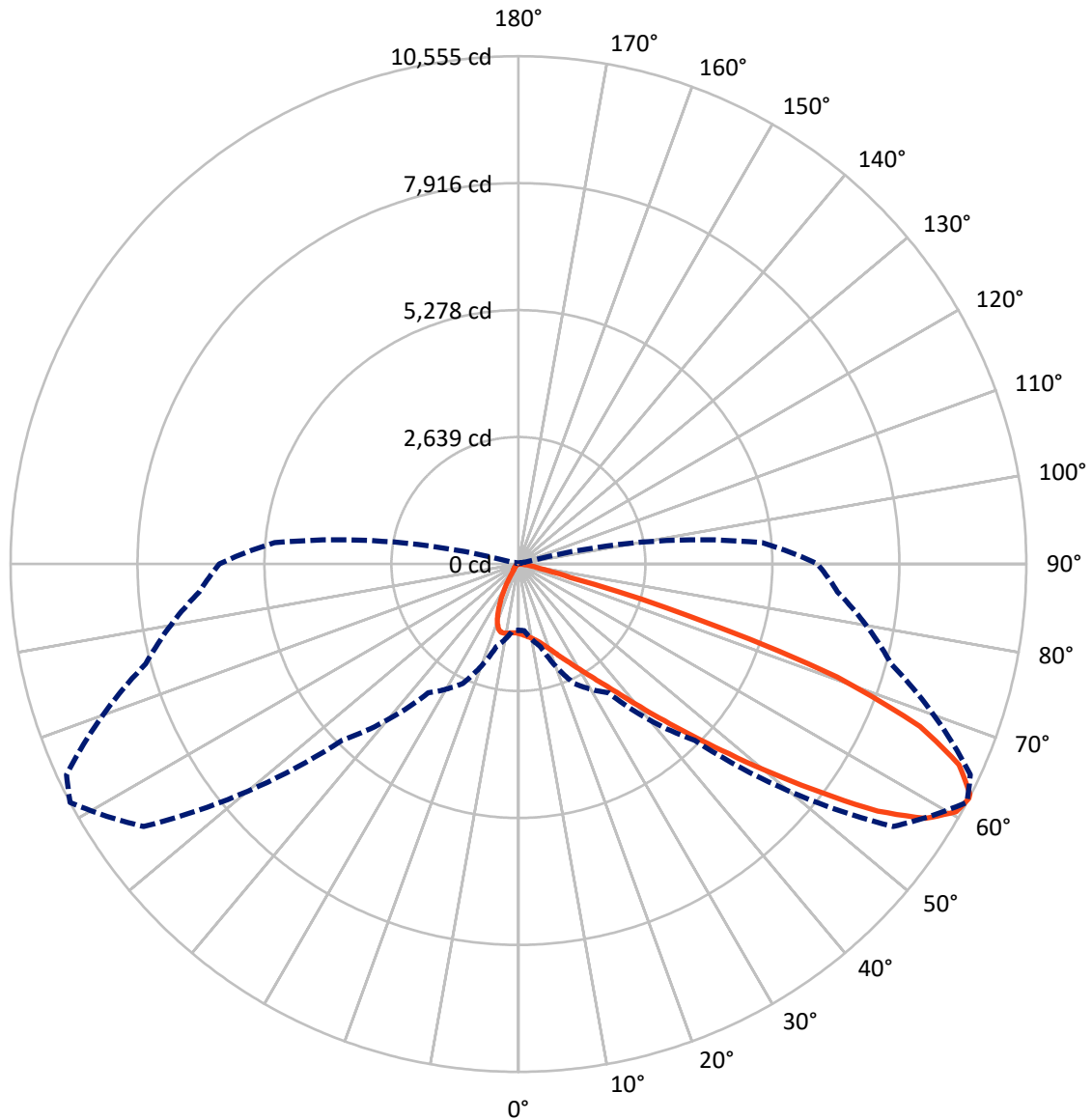


Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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



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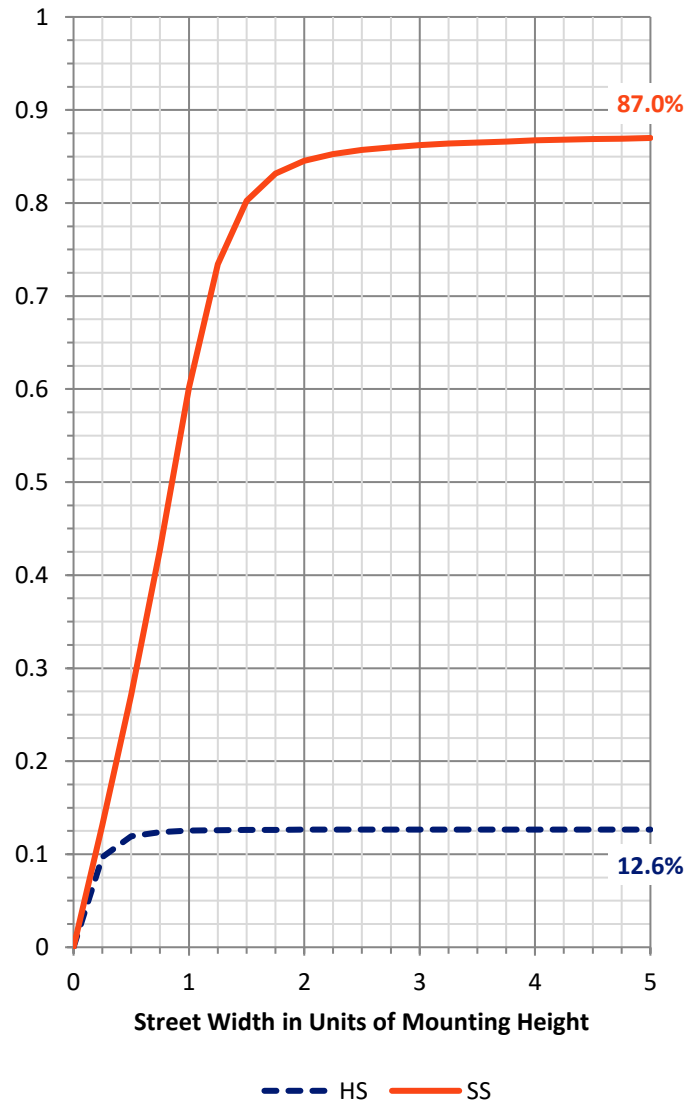
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1535.2	0.0	1535.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	10471.3	0.0	10471.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	12006.5	0.0	12006.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.2	1.2
10°-20°	388.7	3.2
20°-30°	652.8	5.4
30°-40°	1251.3	10.4
40°-50°	2555.9	21.3
50°-60°	3382.3	28.2
60°-70°	2627.5	21.9
70°-80°	948.4	7.9
80°-90°	60.4	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°	12006.5	100.0
0°-180°	12006.5	100.0



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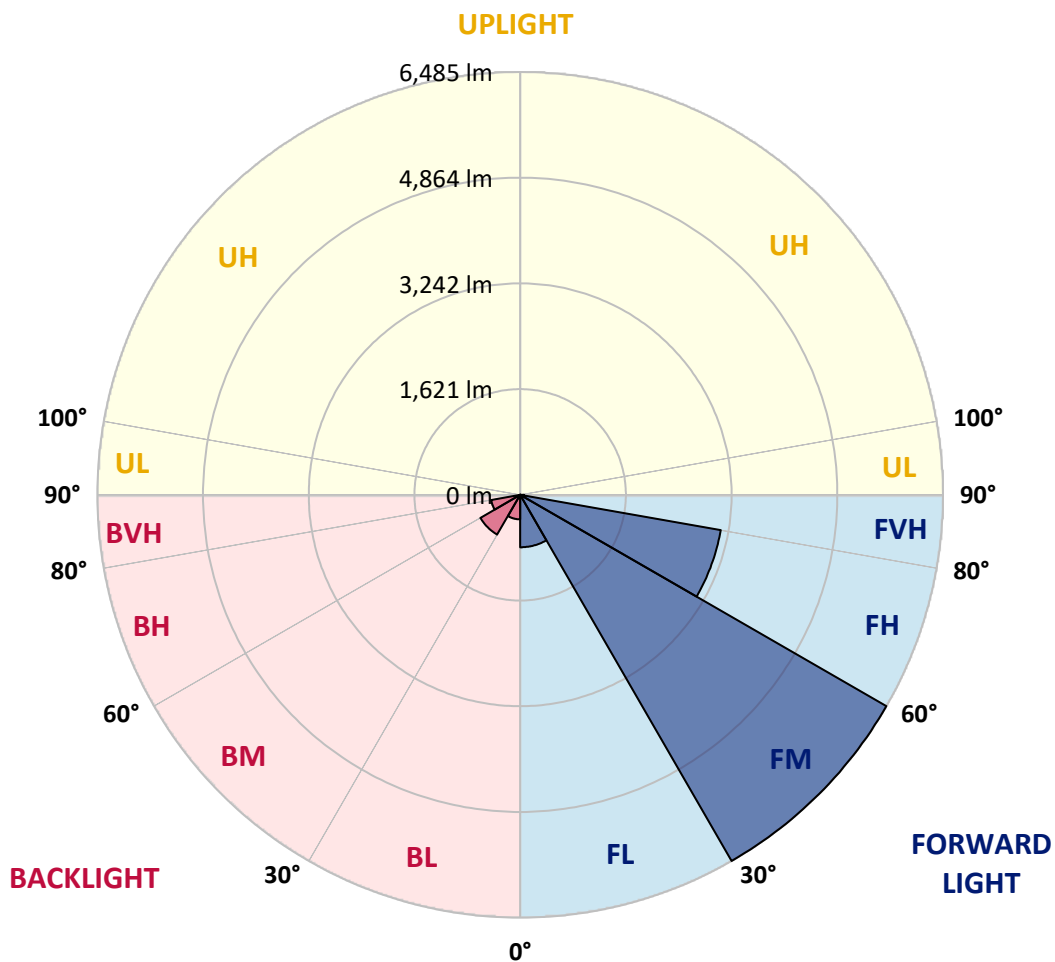
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	804.9	6.7			
FM	(30°-60°)	6484.7	54.0			
FH	(60°-80°)	3123.8	26.0			G2/5000
FVH	(80°-90°)	57.8	0.5			G1/100
BL	(0°-30°)	375.7	3.1	B1/500		
BM	(30°-60°)	704.8	5.9	B1/1000		
BH	(60°-80°)	452.0	3.8	B1/500		G1/500
BVH	(80°-90°)	2.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1484.8	1481.8	1478.9	1475.9	1475.9	1473.0	1470.0	1464.1	1458.2	1452.3	1449.4
5°	1511.3	1508.4	1505.4	1508.4	1505.4	1505.4	1502.5	1496.6	1490.7	1481.8	1473.0
7.5°	1532.0	1529.0	1526.1	1529.0	1532.0	1534.9	1537.9	1532.0	1529.0	1517.2	1508.4
10°	1558.5	1555.6	1552.6	1558.5	1558.5	1573.3	1576.2	1573.3	1570.3	1561.5	1546.7
12.5°	1596.9	1599.8	1599.8	1605.8	1611.7	1629.4	1635.3	1626.5	1626.5	1614.7	1596.9
15°	1667.8	1667.8	1667.8	1673.7	1676.6	1700.2	1706.1	1697.3	1703.2	1682.5	1664.8
17.5°	1735.6	1738.6	1744.5	1756.3	1756.3	1776.9	1788.8	1788.8	1800.6	1774.0	1750.4
20°	1803.6	1806.5	1815.4	1841.9	1841.9	1868.5	1889.1	1898.0	1909.8	1883.2	1841.9
22.5°	1877.3	1877.3	1892.1	1933.4	1924.5	1977.7	2016.1	2030.8	2042.6	2007.2	1942.2
25°	1989.5	1977.7	1989.5	2027.9	2022.0	2095.7	2166.6	2181.4	2196.1	2154.7	2057.4
27.5°	2202.0	2184.3	2142.9	2145.9	2145.9	2231.5	2331.8	2352.5	2361.4	2325.9	2205.0
30°	2627.0	2627.0	2473.5	2370.3	2302.3	2379.1	2520.7	2556.2	2568.0	2514.8	2355.5
32.5°	3367.9	3367.9	3084.5	2821.8	2565.1	2565.1	2727.3	2792.3	2804.1	2742.2	2556.2
35°	4312.5	4306.6	3881.6	3521.4	3019.6	2830.7	2969.4	3078.6	3114.1	3031.4	2815.9
37.5°	5316.0	5277.7	4820.2	4406.9	3719.1	3255.7	3297.1	3441.6	3474.1	3406.2	3152.4
40°	6130.7	6086.4	5717.4	5372.2	4622.4	3934.7	3769.3	3902.2	3940.6	3846.0	3553.8
42.5°	6868.6	6759.5	6505.7	6257.6	5661.4	5109.4	4398.0	4451.2	4492.5	4392.1	4005.5
45°	7402.9	7234.6	7104.8	7028.0	6712.3	6399.4	5212.8	5106.4	5121.2	4997.3	4498.4
47.5°	7417.6	7299.6	7311.4	7512.1	7642.0	7630.2	6272.3	5894.5	5838.5	5631.9	5023.8
50°	6709.3	6777.2	6992.6	7565.2	8267.7	8692.7	7532.8	6827.3	6659.1	6287.1	5546.2
52.5°	5528.5	5634.8	6039.2	7004.4	8359.2	9392.4	8840.3	7892.9	7591.8	6936.6	5947.7
55°	4330.2	4336.1	4761.1	5744.1	7748.2	9519.3	9885.3	9064.7	8604.2	7429.4	6213.3
57.5°	2978.3	3140.6	3680.8	4342.0	6369.9	8887.5	10277.9	9973.8	9380.6	7733.5	6399.4
60°	1951.1	1959.9	2588.7	3353.1	4336.1	7231.7	10038.7	10455.0	10009.2	7913.5	6526.3
62°	1375.5	1390.3	1779.9	2739.2	3267.5	5183.3	9510.5	10555.3	10363.5	8019.8	6659.1
62.5°	1275.2	1287.0	1614.7	2585.7	3069.7	4649.0	9321.6	10531.7	10416.6	8055.2	6706.4
65°	935.7	935.7	1056.7	1776.9	2249.2	2511.9	7898.8	10062.3	10345.8	8338.5	6883.5
67.5°	723.2	729.1	770.4	1095.1	1697.3	1523.1	5041.6	9005.7	9607.8	8757.7	6983.8
70°	622.8	619.8	649.3	726.1	1225.1	1012.4	2219.7	7028.0	8046.4	8651.4	6892.3
72.5°	460.4	463.4	531.3	637.5	853.1	658.2	1003.5	3730.9	5218.7	6771.3	5906.3
75°	295.2	298.2	374.9	501.8	613.9	430.9	578.5	1112.8	2137.0	3754.5	3612.8
77.5°	197.8	203.7	245.0	351.3	537.2	268.6	363.1	466.3	643.4	1408.0	1295.9
80°	132.9	132.9	156.5	236.1	339.5	224.3	194.8	310.0	333.6	436.8	218.4
82.5°	88.5	88.5	103.4	156.5	221.4	200.7	118.1	168.3	194.8	218.4	76.7
85°	53.1	53.1	70.8	97.5	144.7	112.2	76.7	94.5	100.4	138.8	41.3
87.5°	32.4	29.5	47.2	67.8	76.7	67.8	50.1	50.1	53.1	76.7	20.6
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°	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4	1446.4
2.5°	1443.5	1440.5	1437.6	1431.7	1422.8	1416.9	1410.9	1405.0	1399.1	1399.1	1408.0
5°	1470.0	1461.2	1449.4	1437.6	1419.9	1408.0	1399.1	1387.3	1381.4	1381.4	1384.4
7.5°	1502.5	1493.6	1473.0	1452.3	1425.8	1405.0	1384.4	1357.8	1337.2	1328.3	1337.2
10°	1537.9	1526.1	1496.6	1464.1	1434.6	1381.4	1313.6	1231.0	1160.0	1127.5	1142.3
12.5°	1582.1	1567.4	1532.0	1487.7	1419.9	1290.0	1121.6	929.8	808.7	752.7	764.5
15°	1647.1	1626.5	1576.2	1508.4	1357.8	1077.4	802.8	581.5	469.3	422.1	428.0
17.5°	1723.8	1697.3	1629.4	1502.5	1198.3	776.3	478.2	339.5	292.3	280.4	280.4
20°	1806.5	1771.0	1682.5	1458.2	956.3	487.1	298.2	259.7	242.0	233.2	233.2
22.5°	1892.1	1844.9	1726.8	1354.9	681.9	304.1	245.0	218.4	197.8	188.9	188.9
25°	1995.4	1933.4	1771.0	1174.7	433.9	245.0	209.6	183.0	162.4	150.6	153.5
27.5°	2116.4	2036.7	1809.5	950.4	280.4	212.5	174.2	147.6	129.9	124.0	124.0
30°	2243.3	2148.8	1818.3	711.4	227.3	183.0	144.7	121.1	109.3	103.4	103.4
32.5°	2417.5	2293.5	1791.8	472.3	191.9	153.5	121.1	100.4	91.4	88.5	88.5
35°	2647.7	2482.4	1729.7	292.3	162.4	127.0	100.4	88.5	79.6	76.7	76.7
37.5°	2939.9	2745.1	1620.6	200.7	138.8	103.4	85.5	76.7	70.8	67.8	67.8
40°	3329.5	3063.8	1478.9	174.2	118.1	88.5	73.8	67.8	62.0	62.0	62.0
42.5°	3742.7	3450.5	1295.9	153.5	100.4	76.7	64.9	59.0	56.0	53.1	53.1
45°	4194.4	3846.0	1068.5	135.8	85.5	67.8	59.0	50.1	47.2	47.2	47.2
47.5°	4643.1	4253.5	820.5	118.1	73.8	59.0	50.1	44.2	41.3	38.4	38.4
50°	5103.5	4622.4	602.1	103.4	64.9	53.1	44.2	38.4	32.4	29.5	29.5
52.5°	5437.1	4843.8	439.8	88.5	56.0	44.2	35.4	29.5	23.6	20.6	20.6
55°	5682.0	4979.5	321.8	73.8	50.1	38.4	29.5	23.6	17.7	17.7	14.7
57.5°	5873.9	5044.5	242.0	64.9	44.2	32.4	23.6	17.7	14.7	11.8	11.8
60°	6021.5	5047.4	180.1	53.1	38.4	26.6	17.7	11.8	8.8	8.8	8.8
62°	6216.3	5085.8	147.6	44.2	35.4	23.6	14.7	8.8	5.9	2.9	2.9
62.5°	6272.3	5100.6	141.7	44.2	32.4	20.6	11.8	8.8	5.9	2.9	2.9
65°	6532.2	5127.1	109.3	35.4	26.6	17.7	8.8	5.9	0.0	0.0	0.0
67.5°	6768.3	5085.8	79.6	26.6	20.6	11.8	8.8	2.9	0.0	0.0	0.0
70°	6744.7	4802.5	56.0	17.7	14.7	8.8	5.9	0.0	0.0	0.0	0.0
72.5°	5558.1	3595.1	38.4	14.7	8.8	5.9	2.9	0.0	0.0	0.0	0.0
75°	3356.1	1573.3	26.6	8.8	8.8	5.9	2.9	0.0	0.0	0.0	0.0
77.5°	1101.0	569.7	17.7	5.9	5.9	2.9	2.9	0.0	0.0	0.0	0.0
80°	180.1	94.5	8.8	5.9	5.9	2.9	2.9	0.0	0.0	0.0	0.0
82.5°	56.0	23.6	5.9	5.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
85°	20.6	8.8	5.9	5.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	5.9	5.9	5.9	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)