

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: P265825

Luminaire Tested: **ARCH-M-AF48-120-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-120-D-U-T2R-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 785mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10828.7 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 122
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

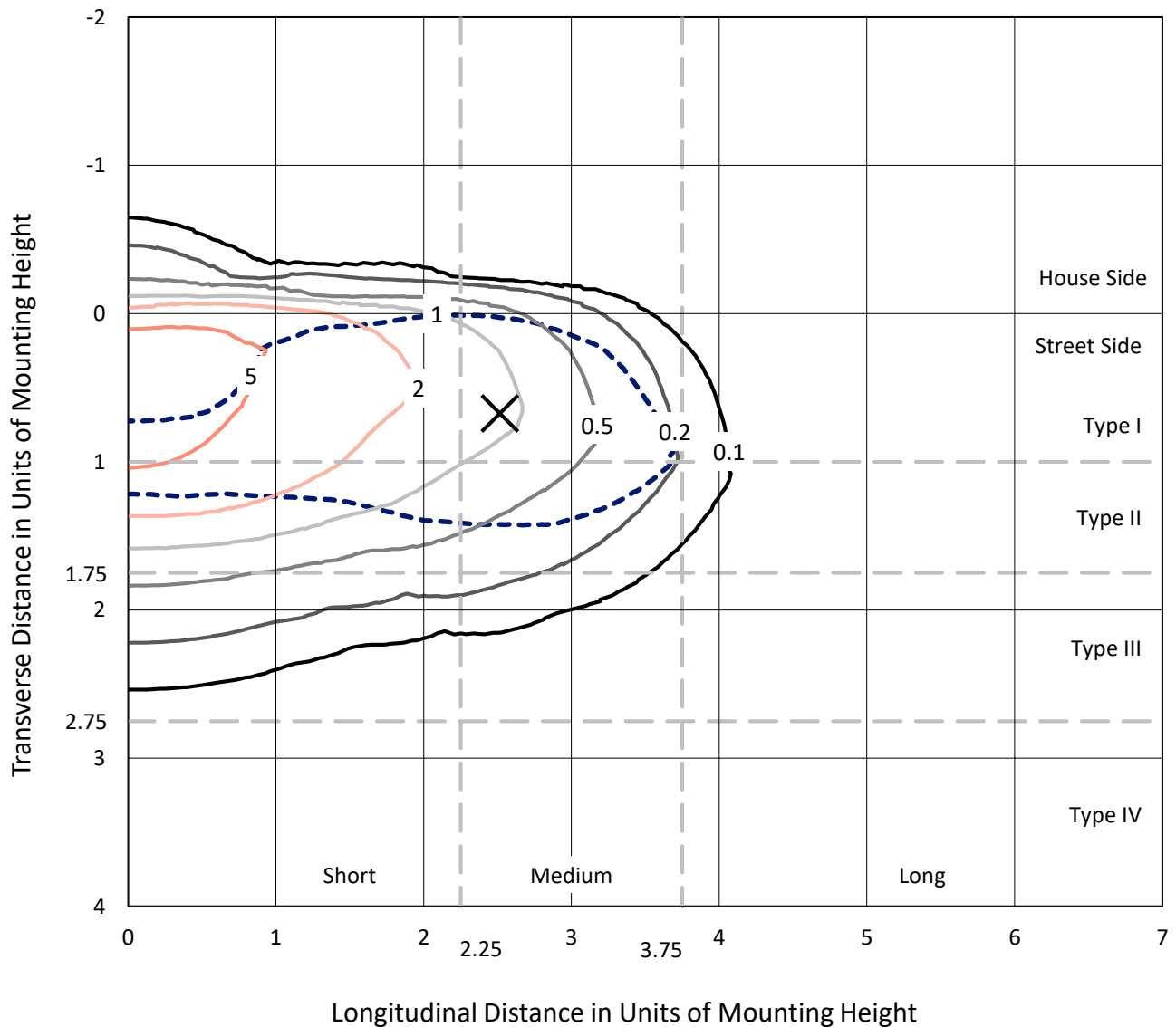


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

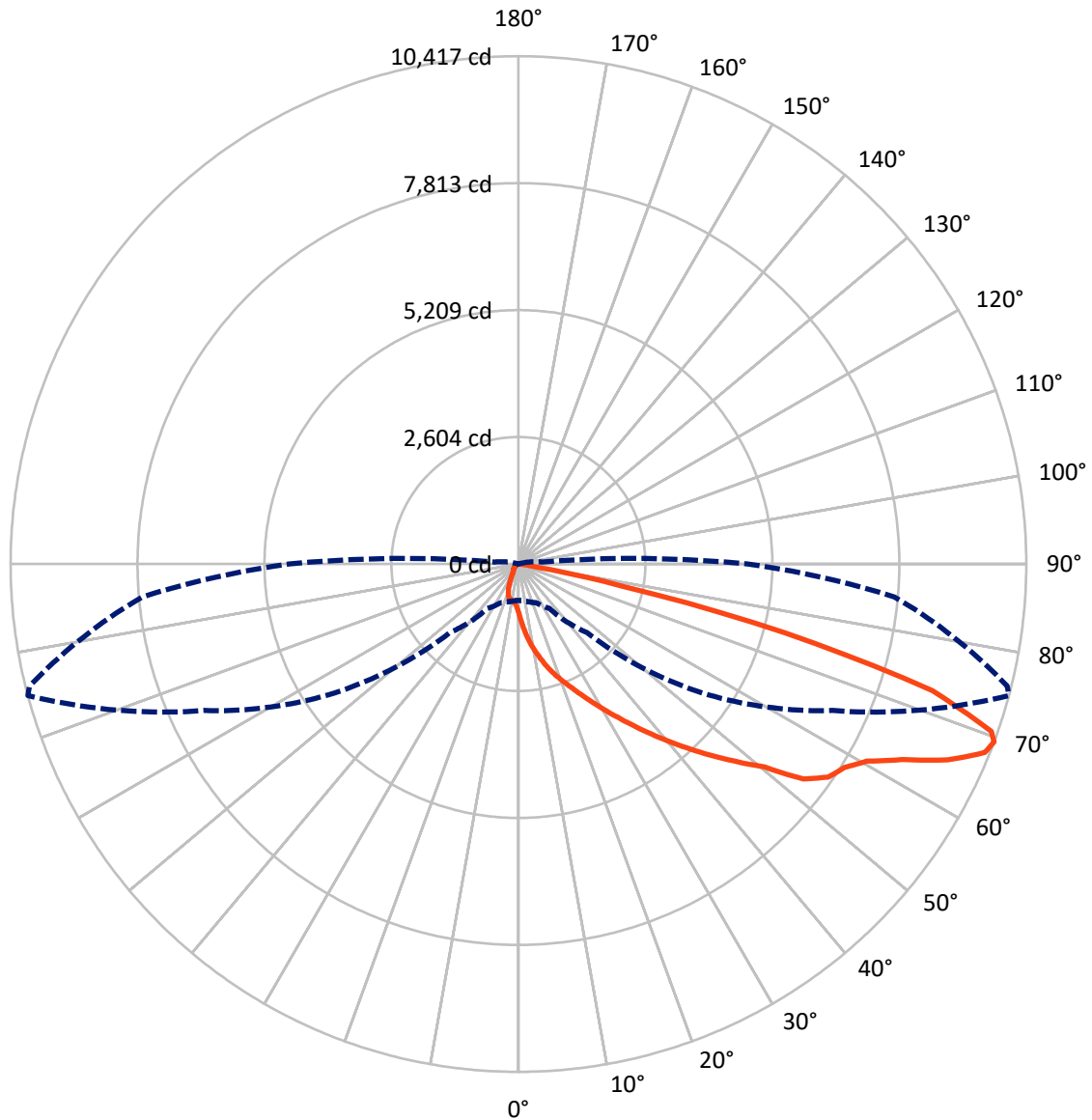


Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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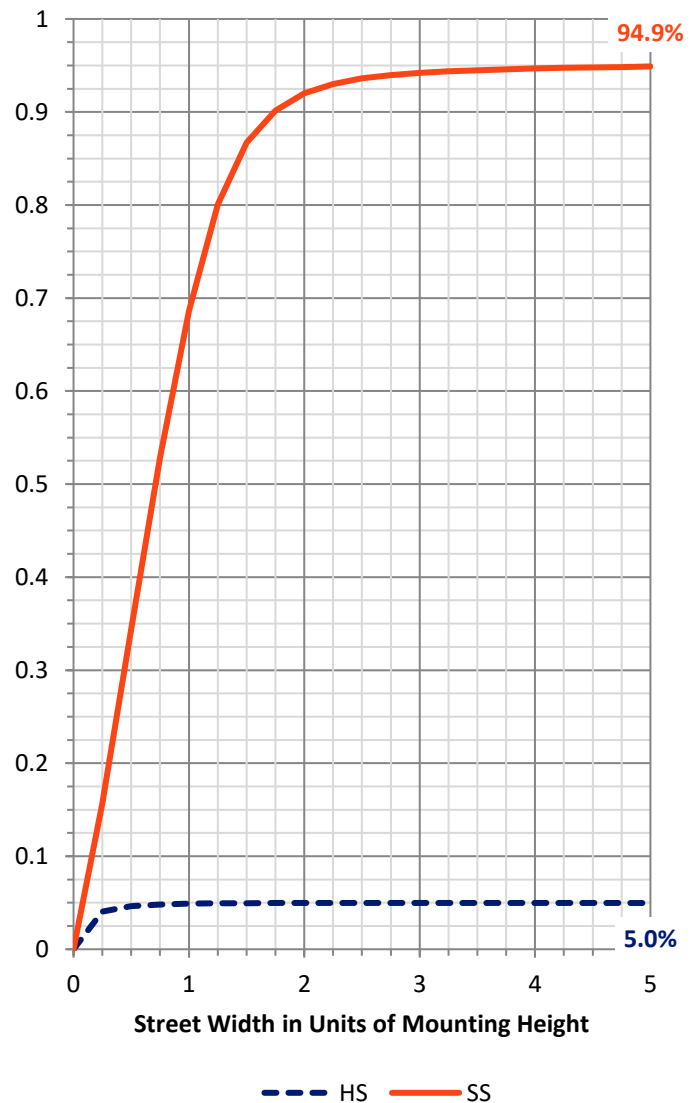
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	540.3	0.0	540.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	10288.4	0.0	10288.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	10828.7	0.0	10828.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	1.1
10°-20°	420.0	3.9
20°-30°	801.9	7.4
30°-40°	1438.4	13.3
40°-50°	2203.8	20.4
50°-60°	2561.4	23.7
60°-70°	2268.1	20.9
70°-80°	978.3	9.0
80°-90°	39.2	0.4
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°	10828.7	100.0
0°-180°	10828.7	100.0

Coefficient of Utilization



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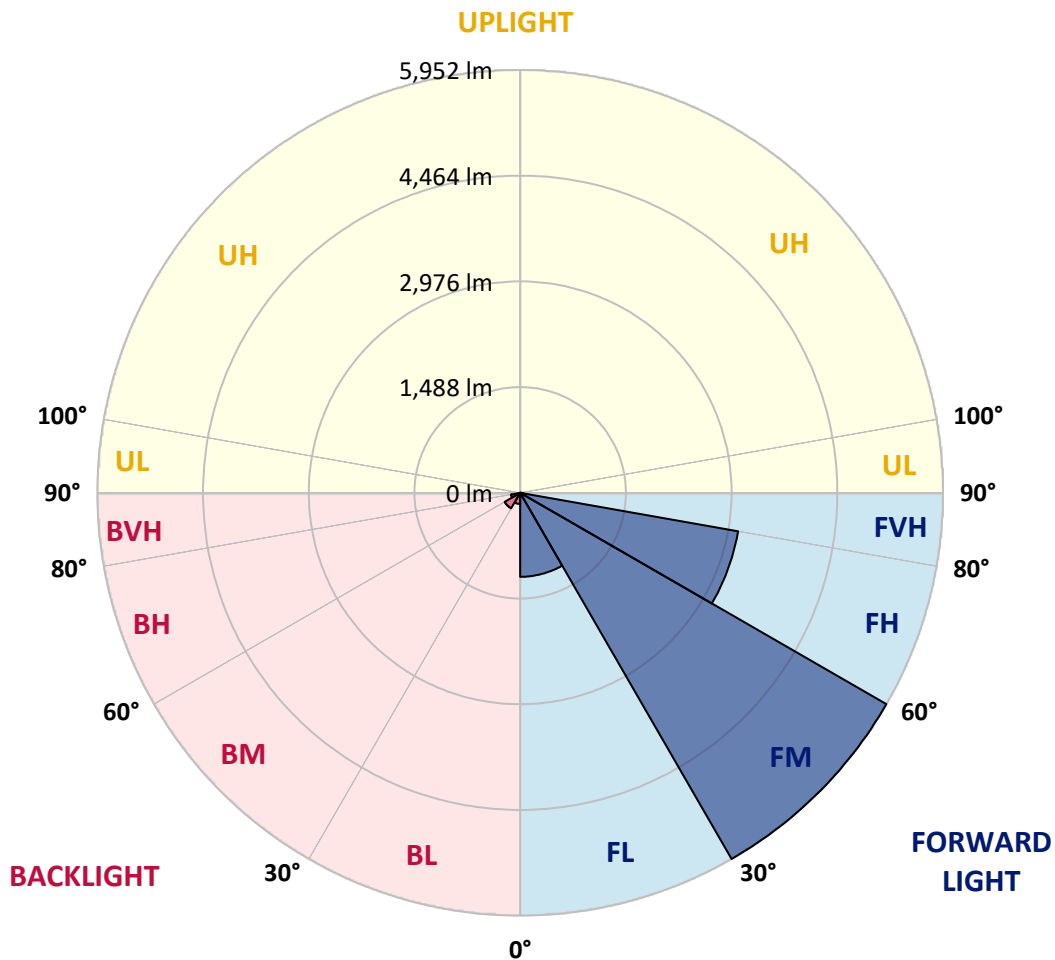
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1182.5	10.9			
FM	(30°-60°)	5951.7	55.0			
FH	(60°-80°)	3115.6	28.8			G2/5000
FVH	(80°-90°)	38.6	0.4			G1/100
BL	(0°-30°)	156.9	1.4	B1/500		
BM	(30°-60°)	251.9	2.3	B1/1000		
BH	(60°-80°)	130.9	1.2	B1/500		G1/500
BVH	(80°-90°)	0.6	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5
2.5°	1659.9	1643.4	1627.1	1608.4	1566.4	1493.9	1402.8	1304.5	1183.0	1161.9	1063.8
5°	2015.2	2008.3	1991.8	1966.1	1919.4	1839.9	1737.1	1592.1	1388.7	1353.6	1145.6
7.5°	2265.3	2260.7	2246.7	2216.3	2174.2	2094.7	1987.1	1830.6	1594.4	1554.6	1248.5
10°	2489.8	2487.4	2475.8	2447.7	2405.7	2319.2	2204.6	2040.9	1790.9	1746.3	1367.6
12.5°	2693.2	2695.5	2690.9	2676.8	2646.4	2564.7	2433.7	2256.1	1980.1	1931.0	1510.2
15°	2812.5	2819.4	2838.1	2866.2	2875.6	2810.1	2674.4	2478.2	2174.2	2132.0	1673.9
17.5°	2772.7	2779.6	2838.1	2934.0	3025.1	3034.6	2912.9	2688.4	2365.9	2323.7	1835.1
20°	2676.8	2686.2	2746.9	2877.9	3055.6	3179.5	3130.4	2917.7	2548.2	2496.7	1989.4
22.5°	2784.3	2784.3	2803.0	2882.5	3043.8	3237.9	3303.3	3146.8	2735.2	2672.2	2143.7
25°	3153.7	3146.8	3107.0	3074.3	3125.7	3298.7	3434.3	3380.5	2955.1	2882.5	2307.4
27.5°	3621.2	3654.0	3579.2	3460.0	3343.1	3418.0	3551.2	3611.9	3198.1	3123.3	2475.8
30°	4145.0	4159.1	4070.2	3911.2	3705.5	3632.9	3689.1	3810.7	3462.3	3380.5	2651.1
32.5°	4617.2	4605.5	4530.7	4364.8	4109.9	3953.4	3866.8	3969.6	3749.9	3656.5	2831.1
35°	5035.7	5045.1	4953.9	4762.2	4511.9	4346.0	4140.3	4149.6	4072.5	3964.9	3039.1
37.5°	5412.1	5395.7	5309.3	5117.6	4890.7	4710.7	4493.3	4336.7	4425.5	4313.3	3273.0
40°	5718.3	5702.0	5610.9	5423.7	5211.0	5063.7	4893.1	4586.8	4797.2	4668.6	3523.2
42.5°	5961.4	5942.7	5865.7	5685.6	5479.9	5349.0	5267.1	4895.5	5194.7	5066.1	3803.7
45°	6080.6	6064.4	6017.6	5882.0	5702.0	5587.4	5627.2	5250.8	5620.2	5512.5	4112.3
47.5°	5940.4	5933.5	5987.3	5963.8	5860.9	5800.1	5938.1	5638.8	6066.7	5961.4	4467.6
50°	5515.0	5526.6	5683.2	5877.3	5926.4	5998.9	6192.9	6048.0	6545.9	6433.8	4876.7
52.5°	4465.3	4544.7	5016.9	5484.5	5846.9	6120.4	6492.1	6632.5	7326.8	7217.0	5515.0
55°	3333.7	3366.5	3880.8	4680.3	5526.6	6111.1	6714.2	6976.1	7712.5	7600.3	5683.2
57.5°	2644.2	2655.7	2910.6	3726.4	4867.3	5900.6	6831.2	7100.1	7880.8	7787.2	5933.5
60°	2076.1	2090.0	2274.7	2835.8	3939.2	5332.6	6662.8	7207.6	8210.5	8135.7	6370.6
62.5°	1615.4	1629.4	1741.6	2071.3	2955.1	4458.3	6323.9	7380.6	8836.9	8802.0	7086.0
65°	1250.7	1255.4	1332.5	1486.9	2087.8	3511.5	5909.9	7541.8	9683.3	9652.8	7665.7
67.5°	923.5	930.5	984.3	1080.1	1409.7	2522.5	5232.1	7417.9	10321.5	10232.8	7876.2
69°	745.8	752.8	799.5	876.7	1112.8	1987.1	4612.5	7111.7	10417.4	10333.3	7742.9
70°	638.2	642.8	689.7	755.1	949.1	1687.9	4121.7	6847.5	10291.2	10209.2	7439.0
72.5°	409.1	432.5	479.2	521.3	628.9	1117.5	2782.1	5678.5	8879.0	8738.8	5825.9
75°	226.7	233.7	317.9	369.4	418.5	727.1	1547.6	3541.7	5648.3	5550.0	3116.3
77.5°	187.0	191.7	224.4	280.5	280.5	406.8	584.4	1395.6	2148.4	1938.1	844.0
80°	131.0	135.6	170.7	184.7	201.0	229.1	189.4	306.2	332.0	294.6	126.2
82.5°	91.2	95.8	116.9	152.0	161.3	107.5	70.2	91.2	95.8	95.8	49.0
85°	16.3	23.4	86.4	126.2	95.8	32.7	39.7	32.7	30.5	32.7	11.7
87.5°	0.0	0.0	53.8	60.7	51.5	14.1	16.3	11.7	6.9	9.3	4.8
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°	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5	1007.5
2.5°	1014.6	965.5	881.3	820.6	769.2	729.5	713.1	687.4	668.6	678.0	666.4
5°	1042.7	956.2	820.6	734.0	673.3	621.8	579.8	547.1	521.3	516.6	511.9
7.5°	1087.0	963.3	785.5	678.0	586.9	507.4	441.8	392.7	355.4	355.4	341.4
10°	1147.9	981.8	764.5	621.8	486.3	378.7	313.2	266.4	247.8	245.4	240.7
12.5°	1232.0	1016.9	748.1	549.5	378.7	275.9	236.2	219.7	212.8	210.5	208.0
15°	1346.6	1068.4	729.5	460.6	287.5	226.7	210.5	196.4	189.4	187.0	184.7
17.5°	1456.4	1115.2	689.7	369.4	233.7	205.7	187.0	175.3	165.9	163.6	163.6
20°	1559.4	1155.0	621.8	287.5	210.5	184.7	165.9	152.0	142.7	140.2	140.2
22.5°	1666.8	1187.6	537.6	233.7	191.7	163.6	144.9	131.0	121.6	119.3	116.9
25°	1781.3	1210.9	441.8	208.0	173.1	144.9	123.8	112.2	105.2	102.9	100.5
27.5°	1905.3	1220.3	350.7	189.4	152.0	126.2	107.5	95.8	91.2	88.8	88.8
30°	2017.6	1210.9	271.2	168.3	133.3	110.0	93.6	84.1	79.5	77.2	77.2
32.5°	2134.5	1187.6	217.4	149.6	116.9	93.6	79.5	72.5	70.2	67.8	67.8
35°	2258.3	1157.2	187.0	133.3	100.5	81.8	70.2	65.4	63.2	60.7	60.7
37.5°	2403.2	1119.7	170.7	119.3	88.8	72.5	60.7	58.4	56.1	56.1	56.1
40°	2566.9	1073.0	159.0	107.5	79.5	63.2	53.8	51.5	49.0	49.0	49.0
42.5°	2739.9	1019.2	147.3	95.8	70.2	53.8	46.7	46.7	44.5	44.5	42.1
45°	2934.0	965.5	135.6	84.1	60.7	46.7	39.7	37.4	37.4	35.0	35.0
47.5°	3163.1	916.5	123.8	74.7	53.8	39.7	35.0	32.7	30.5	28.0	28.0
50°	3485.8	911.8	110.0	65.4	49.0	32.7	28.0	25.7	23.4	21.0	21.0
52.5°	3805.9	869.6	93.6	53.8	39.7	28.0	21.0	18.8	16.3	16.3	14.1
55°	3878.4	799.5	81.8	46.7	30.5	21.0	16.3	11.7	11.7	9.3	9.3
57.5°	4037.4	766.9	70.2	37.4	23.4	16.3	9.3	6.9	6.9	6.9	6.9
60°	4350.8	757.5	60.7	32.7	16.3	11.7	6.9	4.8	4.8	2.3	2.3
62.5°	4783.3	748.1	51.5	28.0	11.7	6.9	4.8	2.3	0.0	0.0	0.0
65°	5021.6	685.0	42.1	21.0	9.3	6.9	2.3	0.0	0.0	0.0	0.0
67.5°	4958.6	565.8	37.4	14.1	6.9	4.8	2.3	0.0	0.0	0.0	0.0
69°	4694.4	476.9	30.5	11.7	6.9	4.8	2.3	0.0	0.0	0.0	0.0
70°	4376.5	411.5	28.0	9.3	4.8	2.3	2.3	0.0	0.0	0.0	0.0
72.5°	3107.0	215.1	18.8	6.9	4.8	2.3	0.0	0.0	0.0	0.0	0.0
75°	1451.8	95.8	11.7	4.8	2.3	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	320.2	44.5	6.9	4.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	60.7	16.3	4.8	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.0	6.9	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.0	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)