

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: P265717

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265717
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-L-AF72-250-D-U-T2R-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1070mA 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: 19579.6 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 251
Input Voltage (V): NR
Input Current (A_{in}): 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

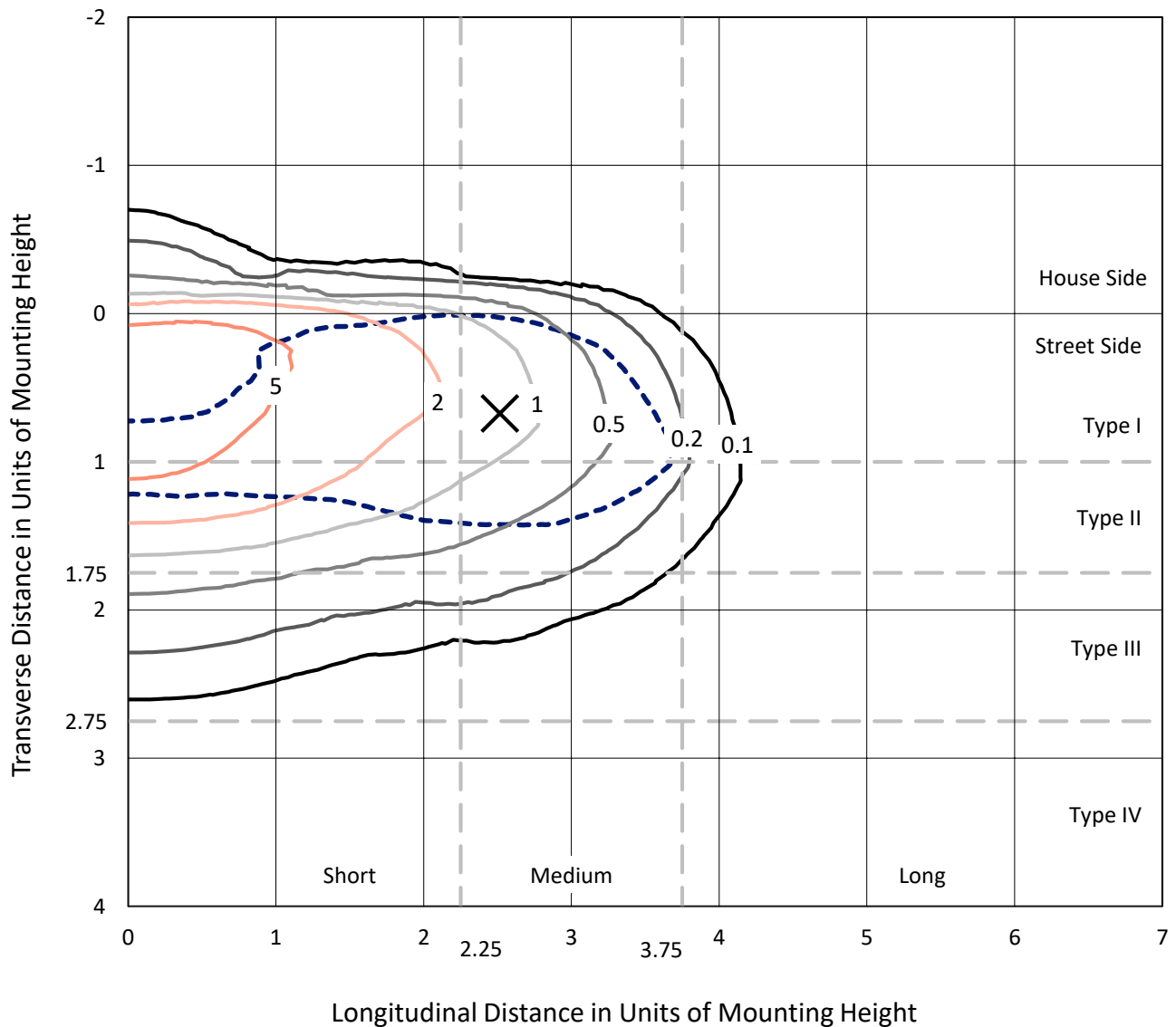


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

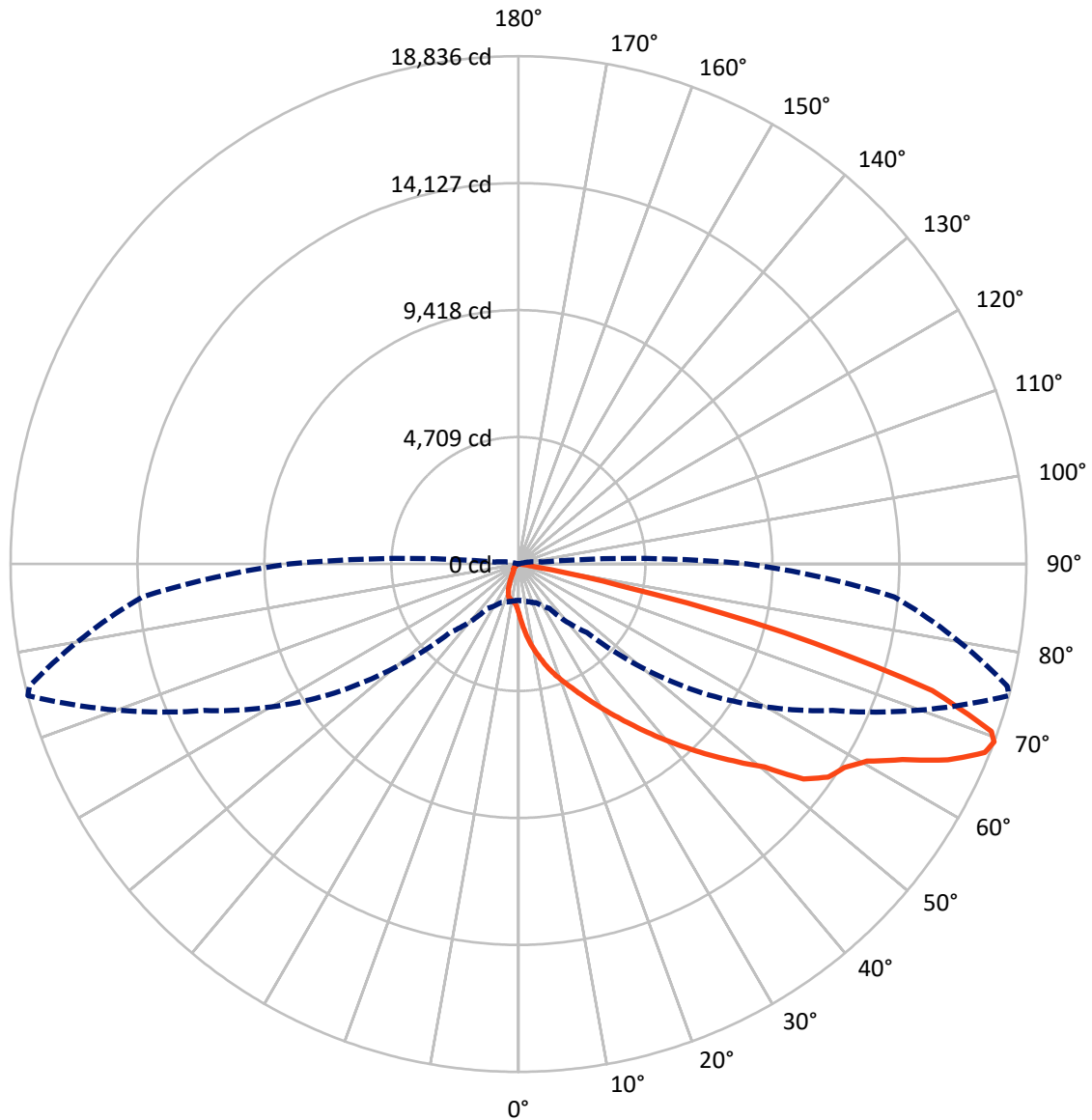


Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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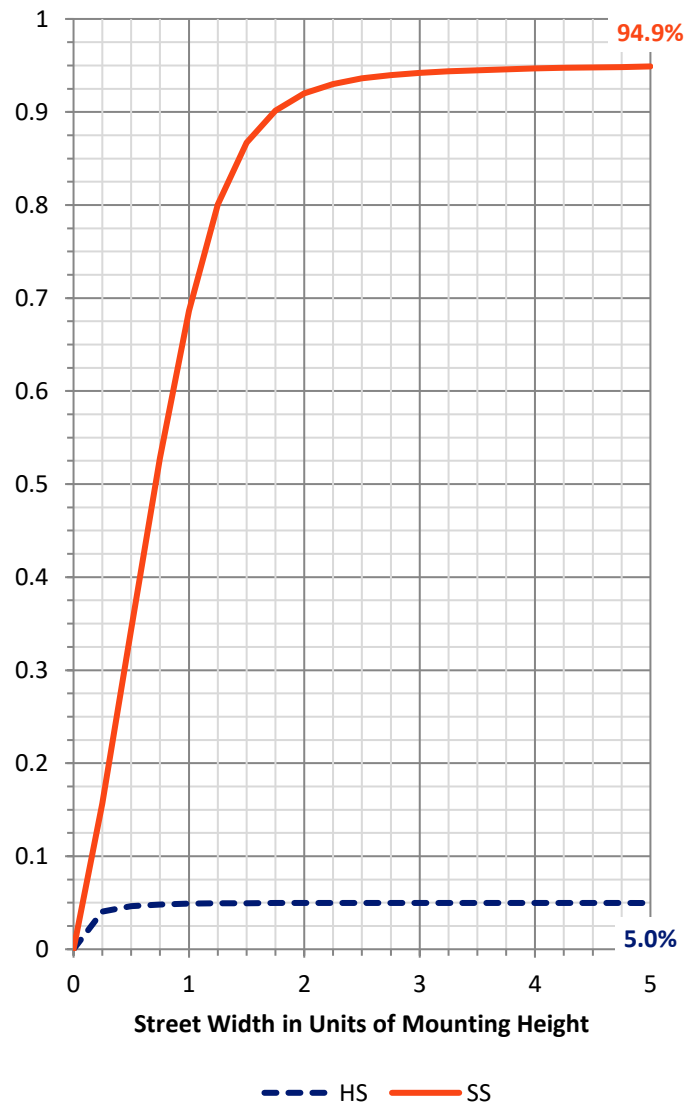
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	976.9	0.0	976.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	18602.7	0.0	18602.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	19579.6	0.0	19579.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.4	1.1
10°-20°	759.5	3.9
20°-30°	1449.9	7.4
30°-40°	2600.9	13.3
40°-50°	3984.8	20.4
50°-60°	4631.3	23.7
60°-70°	4101.0	20.9
70°-80°	1768.9	9.0
80°-90°	70.9	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°	19579.6	100.0
0°-180°	19579.6	100.0

Coefficient of Utilization



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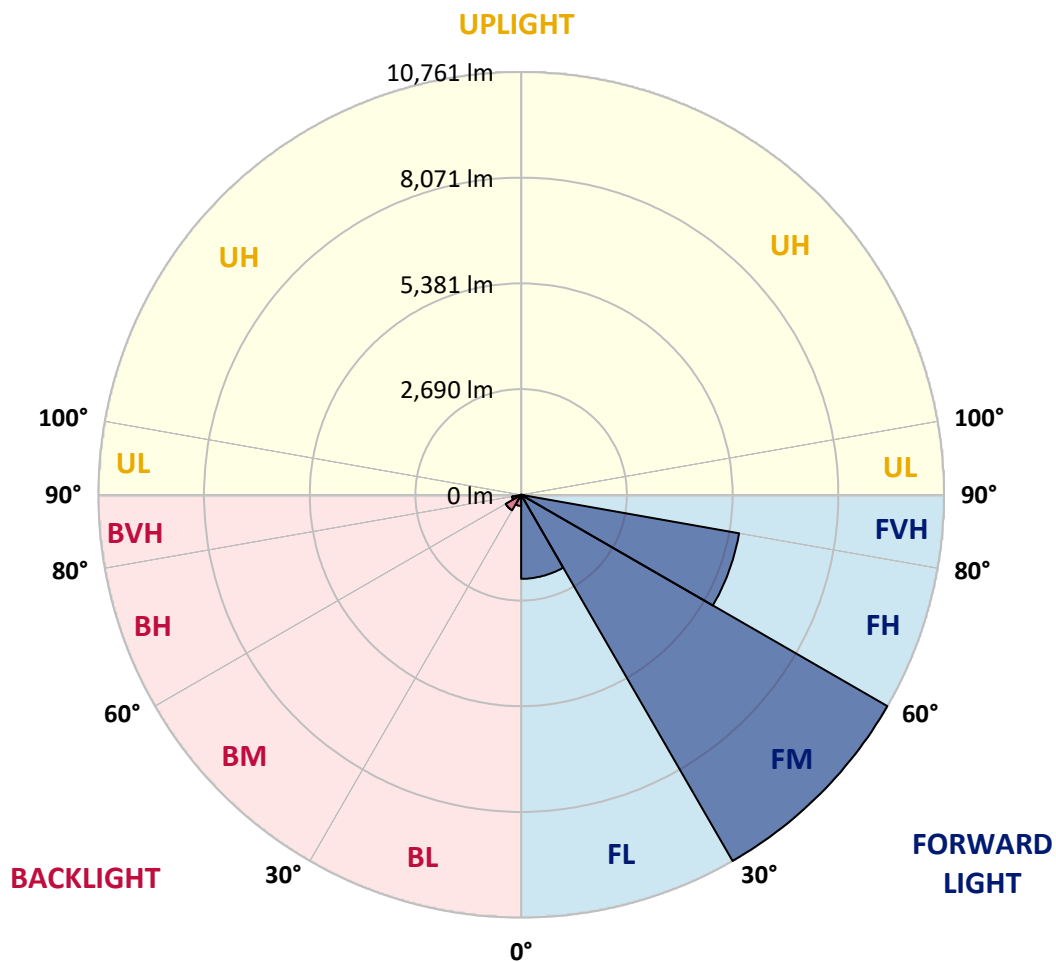
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2138.1	10.9			
FM	(30°-60°)	10761.4	55.0			
FH	(60°-80°)	5633.3	28.8			G3/7500
FVH	(80°-90°)	69.8	0.4			G1/100
BL	(0°-30°)	283.7	1.4	B1/500		
BM	(30°-60°)	455.5	2.3	B1/1000		
BH	(60°-80°)	236.7	1.2	B1/500		G1/500
BVH	(80°-90°)	1.0	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9
2.5°	3001.2	2971.7	2942.0	2908.3	2832.1	2701.2	2536.3	2358.7	2139.0	2100.9	1923.4
5°	3643.7	3631.0	3601.5	3555.0	3470.4	3326.8	3140.7	2878.7	2510.9	2447.5	2071.3
7.5°	4096.0	4087.6	4062.2	4007.2	3931.3	3787.4	3593.0	3309.9	2882.9	2810.9	2257.4
10°	4501.9	4497.6	4476.4	4425.8	4349.7	4193.3	3986.0	3690.2	3237.9	3157.6	2472.9
12.5°	4869.6	4873.8	4865.4	4840.0	4785.0	4637.1	4400.3	4079.2	3580.4	3491.5	2730.7
15°	5085.1	5097.8	5131.7	5182.4	5199.3	5081.0	4835.8	4480.7	3931.3	3855.0	3026.6
17.5°	5013.4	5025.9	5131.7	5305.0	5469.8	5486.8	5266.9	4861.2	4277.8	4201.7	3318.2
20°	4840.0	4857.0	4966.8	5203.5	5524.8	5748.9	5660.1	5275.3	4607.5	4514.5	3597.3
22.5°	5034.5	5034.5	5068.2	5212.0	5503.6	5854.6	5972.9	5689.7	4945.7	4831.5	3876.2
25°	5702.4	5689.7	5617.8	5558.6	5651.5	5964.3	6209.5	6112.3	5342.9	5212.0	4172.1
27.5°	6547.7	6606.9	6471.7	6256.1	6044.8	6180.0	6420.9	6530.9	5782.7	5647.4	4476.4
30°	7494.6	7520.0	7359.4	7071.8	6699.9	6568.9	6670.4	6890.1	6260.3	6112.3	4793.5
32.5°	8348.5	8327.4	8192.2	7892.0	7431.1	7148.1	6991.6	7177.5	6780.2	6611.2	5119.0
35°	9105.1	9122.1	8957.2	8610.6	8158.2	7858.2	7486.1	7503.1	7363.5	7169.2	5495.2
37.5°	9785.6	9756.1	9599.6	9253.1	8843.0	8517.5	8124.5	7841.2	8001.8	7798.9	5917.9
40°	10339.4	10309.8	10145.0	9806.8	9422.1	9155.9	8847.2	8293.5	8673.9	8441.6	6370.2
42.5°	10779.0	10745.3	10605.7	10280.3	9908.2	9671.5	9523.7	8851.4	9392.6	9160.0	6877.5
45°	10994.6	10965.0	10880.5	10635.4	10309.8	10102.7	10174.7	9494.0	10161.8	9967.5	7435.5
47.5°	10741.0	10728.4	10825.6	10783.3	10597.2	10487.4	10736.8	10195.8	10969.3	10779.0	8078.0
50°	9971.6	9992.8	10276.0	10626.9	10715.6	10846.7	11197.6	10935.4	11835.8	11633.0	8817.8
52.5°	8073.7	8217.4	9071.4	9916.7	10572.0	11066.5	11738.6	11992.3	13247.7	13049.0	9971.6
55°	6027.8	6086.9	7017.0	8462.7	9992.8	11049.6	12140.1	12613.6	13945.2	13742.2	10276.0
57.5°	4780.8	4802.0	5262.7	6737.9	8800.8	10669.2	12351.5	12837.7	14249.5	14080.5	10728.4
60°	3753.7	3779.0	4113.0	5127.4	7122.7	9642.0	12047.2	13032.2	14845.5	14710.3	11518.7
62.5°	2920.8	2946.4	3149.2	3745.3	5342.9	8061.0	11434.3	13345.0	15978.3	15914.9	12812.3
65°	2261.6	2269.9	2409.4	2688.4	3774.8	6349.1	10686.1	13636.6	17508.5	17453.6	13860.6
67.5°	1669.7	1682.3	1779.6	1952.9	2548.9	4561.1	9460.2	13412.6	18662.6	18501.9	14241.0
69°	1348.4	1361.1	1445.6	1585.1	2012.2	3593.0	8340.0	12858.8	18835.9	18683.7	14000.1
70°	1154.1	1162.4	1246.9	1365.3	1716.2	3051.9	7452.3	12381.1	18607.6	18459.7	13450.6
72.5°	739.8	782.1	866.5	942.6	1137.1	2020.6	5030.1	10267.5	16054.5	15800.8	10533.9
75°	410.0	422.7	574.8	667.9	756.6	1314.6	2798.3	6404.0	10212.7	10035.1	5634.7
77.5°	338.1	346.7	405.9	507.3	507.3	735.5	1056.8	2523.6	3884.7	3504.3	1526.0
80°	236.8	245.1	308.6	333.9	363.5	414.3	342.4	553.7	600.2	532.6	228.3
82.5°	164.8	173.4	211.3	274.7	291.7	194.5	126.8	164.8	173.4	173.4	88.8
85°	29.6	42.3	156.5	228.3	173.4	59.2	71.9	59.2	54.9	59.2	21.1
87.5°	0.0	0.0	97.2	110.0	93.1	25.3	29.6	21.1	12.7	16.9	8.4
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°	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9
2.5°	1834.6	1745.8	1593.7	1483.7	1390.7	1318.8	1289.2	1242.7	1208.9	1225.8	1204.6
5°	1885.3	1728.9	1483.7	1327.2	1217.5	1124.4	1048.3	989.2	942.6	934.1	925.8
7.5°	1965.6	1741.5	1420.3	1225.8	1061.0	917.3	799.0	710.1	642.5	642.5	617.1
10°	2075.5	1775.4	1382.2	1124.4	879.3	684.8	566.4	481.9	448.1	443.9	435.4
12.5°	2227.6	1838.8	1352.7	993.3	684.8	498.7	427.0	397.3	384.7	380.4	376.2
15°	2434.8	1931.7	1318.8	832.6	519.8	410.0	380.4	355.1	342.4	338.1	333.9
17.5°	2633.6	2016.3	1246.9	667.9	422.7	372.0	338.1	317.0	300.2	295.9	295.9
20°	2819.5	2088.2	1124.4	519.8	380.4	333.9	300.2	274.7	257.9	253.6	253.6
22.5°	3014.0	2147.4	972.2	422.7	346.7	295.9	262.0	236.8	219.8	215.6	211.3
25°	3221.1	2189.6	799.0	376.2	312.8	262.0	224.0	202.8	190.3	185.9	181.7
27.5°	3445.1	2206.5	634.1	342.4	274.7	228.3	194.5	173.4	164.8	160.6	160.6
30°	3647.9	2189.6	490.4	304.3	240.9	198.6	169.2	152.2	143.6	139.4	139.4
32.5°	3859.3	2147.4	393.1	270.5	211.3	169.2	143.6	131.1	126.8	122.6	122.6
35°	4083.3	2092.4	338.1	240.9	181.7	148.0	126.8	118.3	114.2	110.0	110.0
37.5°	4345.5	2024.8	308.6	215.6	160.6	131.1	110.0	105.7	101.5	101.5	101.5
40°	4641.4	1940.2	287.5	194.5	143.6	114.2	97.2	93.1	88.8	88.8	88.8
42.5°	4954.2	1843.1	266.3	173.4	126.8	97.2	84.5	84.5	80.3	80.3	76.0
45°	5305.0	1745.8	245.1	152.2	110.0	84.5	71.9	67.6	67.6	63.4	63.4
47.5°	5719.2	1657.1	224.0	135.3	97.2	71.9	63.4	59.2	54.9	50.8	50.8
50°	6302.6	1648.6	198.6	118.3	88.8	59.2	50.8	46.5	42.3	38.1	38.1
52.5°	6881.6	1572.5	169.2	97.2	71.9	50.8	38.1	33.9	29.6	29.6	25.3
55°	7012.7	1445.6	148.0	84.5	54.9	38.1	29.6	21.1	21.1	16.9	16.9
57.5°	7300.2	1386.4	126.8	67.6	42.3	29.6	16.9	12.7	12.7	12.7	12.7
60°	7866.5	1369.6	110.0	59.2	29.6	21.1	12.7	8.4	8.4	4.2	4.2
62.5°	8648.6	1352.7	93.1	50.8	21.1	12.7	8.4	4.2	0.0	0.0	0.0
65°	9079.8	1238.6	76.0	38.1	16.9	12.7	4.2	0.0	0.0	0.0	0.0
67.5°	8965.7	1023.0	67.6	25.3	12.7	8.4	4.2	0.0	0.0	0.0	0.0
69°	8487.9	862.4	54.9	21.1	12.7	8.4	4.2	0.0	0.0	0.0	0.0
70°	7913.1	743.9	50.8	16.9	8.4	4.2	4.2	0.0	0.0	0.0	0.0
72.5°	5617.8	388.8	33.9	12.7	8.4	4.2	0.0	0.0	0.0	0.0	0.0
75°	2624.9	173.4	21.1	8.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0
77.5°	579.0	80.3	12.7	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	110.0	29.6	8.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.1	12.7	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	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)