

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: P214881

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214881
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T4W-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2825 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 21
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

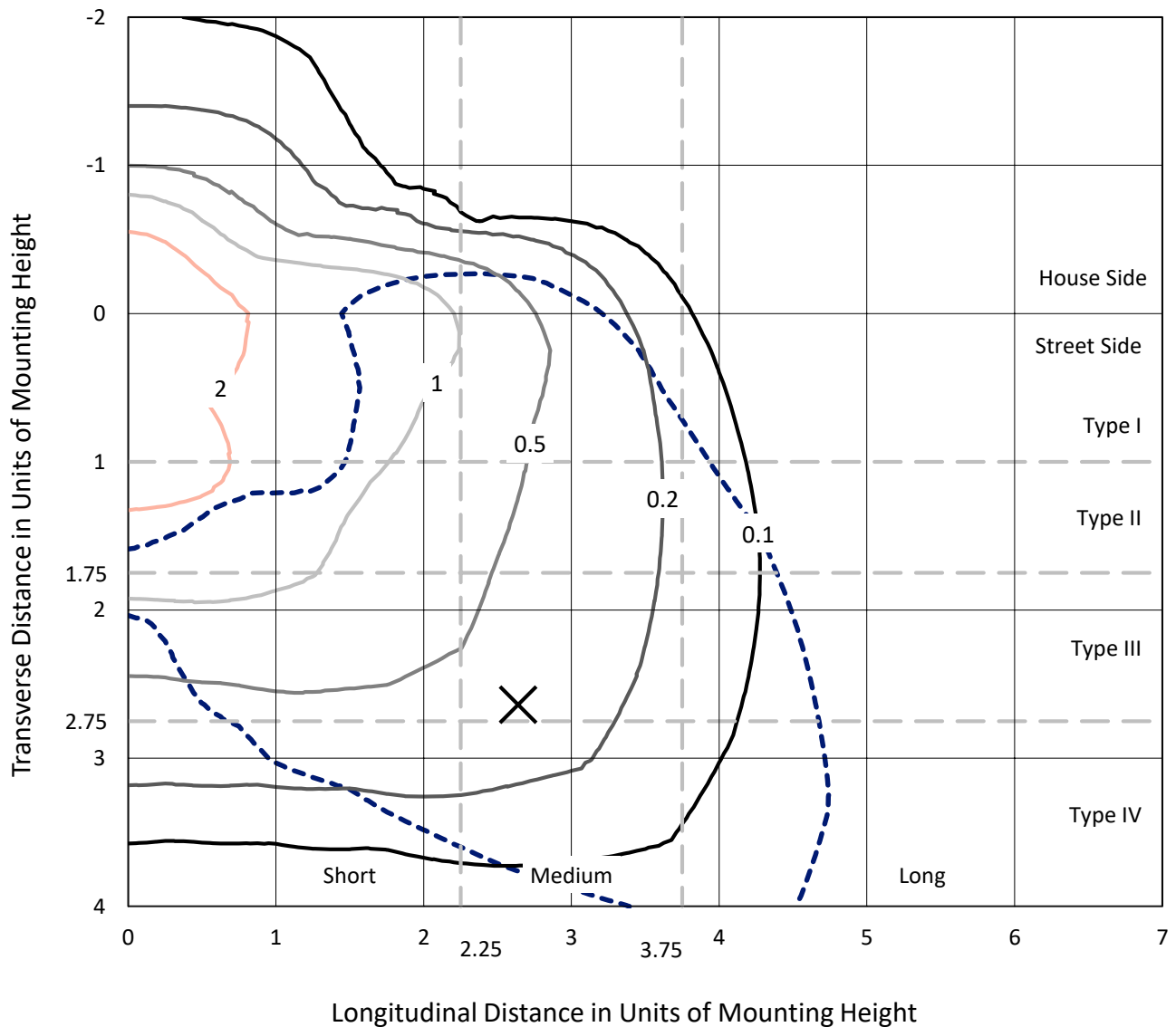


REPORT NUMBER: P214881

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

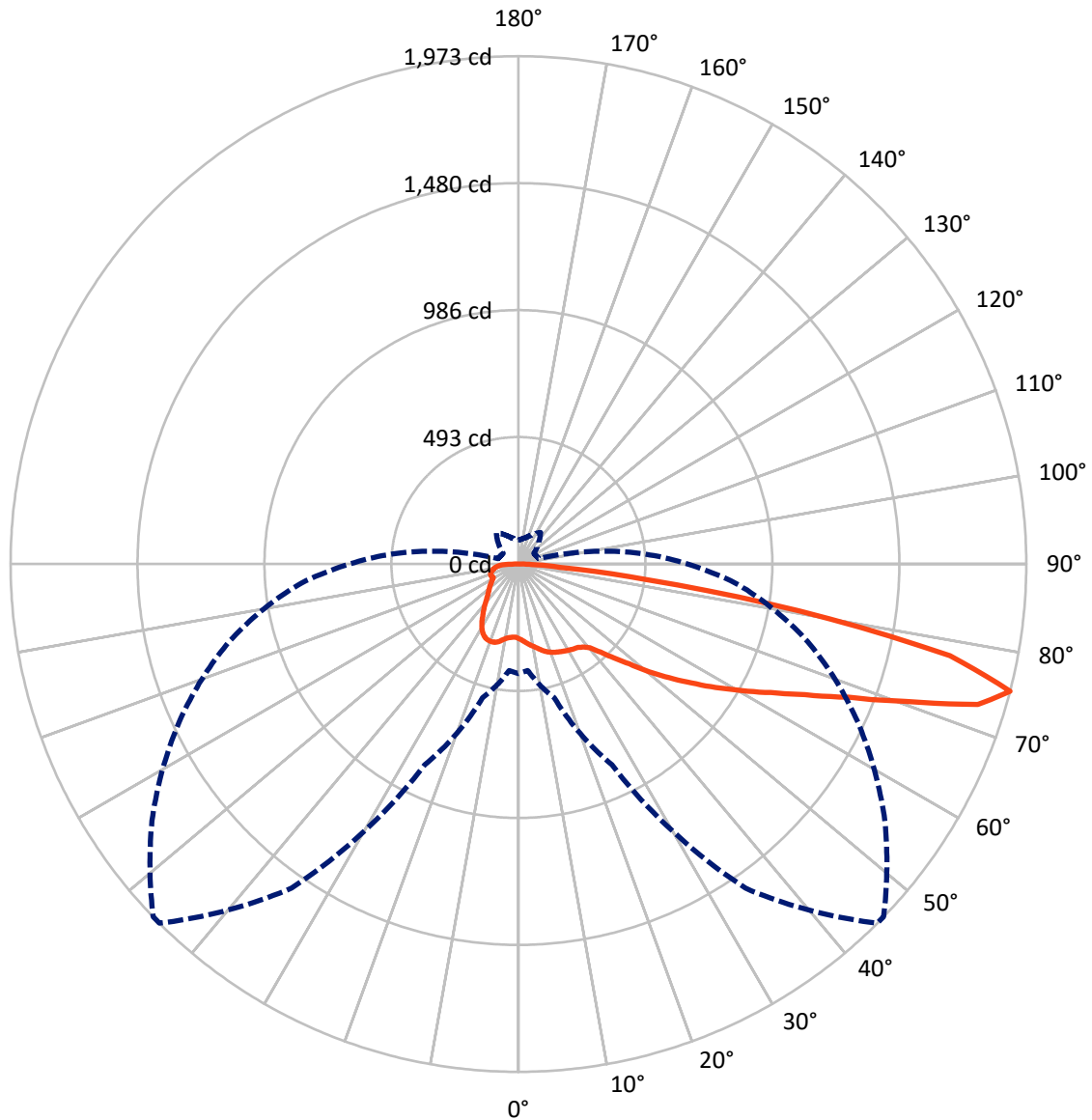


Based on 10 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214881

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P214881

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

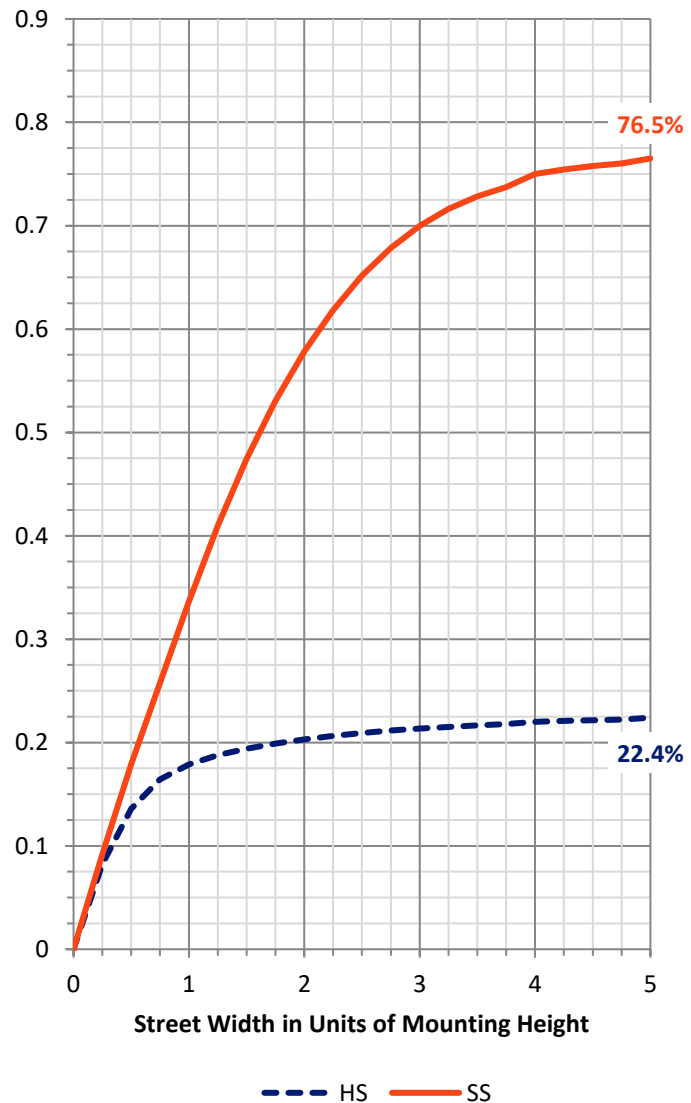
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	654.4	0.0	654.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	2170.6	0.0	2170.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	2825.0	0.0	2825.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.7	1.0
10°-20°	93.0	3.3
20°-30°	159.6	5.6
30°-40°	223.2	7.9
40°-50°	327.4	11.6
50°-60°	510.0	18.1
60°-70°	733.9	26.0
70°-80°	639.3	22.6
80°-90°	109.8	3.9
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°	2825.0	100.0
0°-180°	2825.0	100.0



REPORT NUMBER: P214881

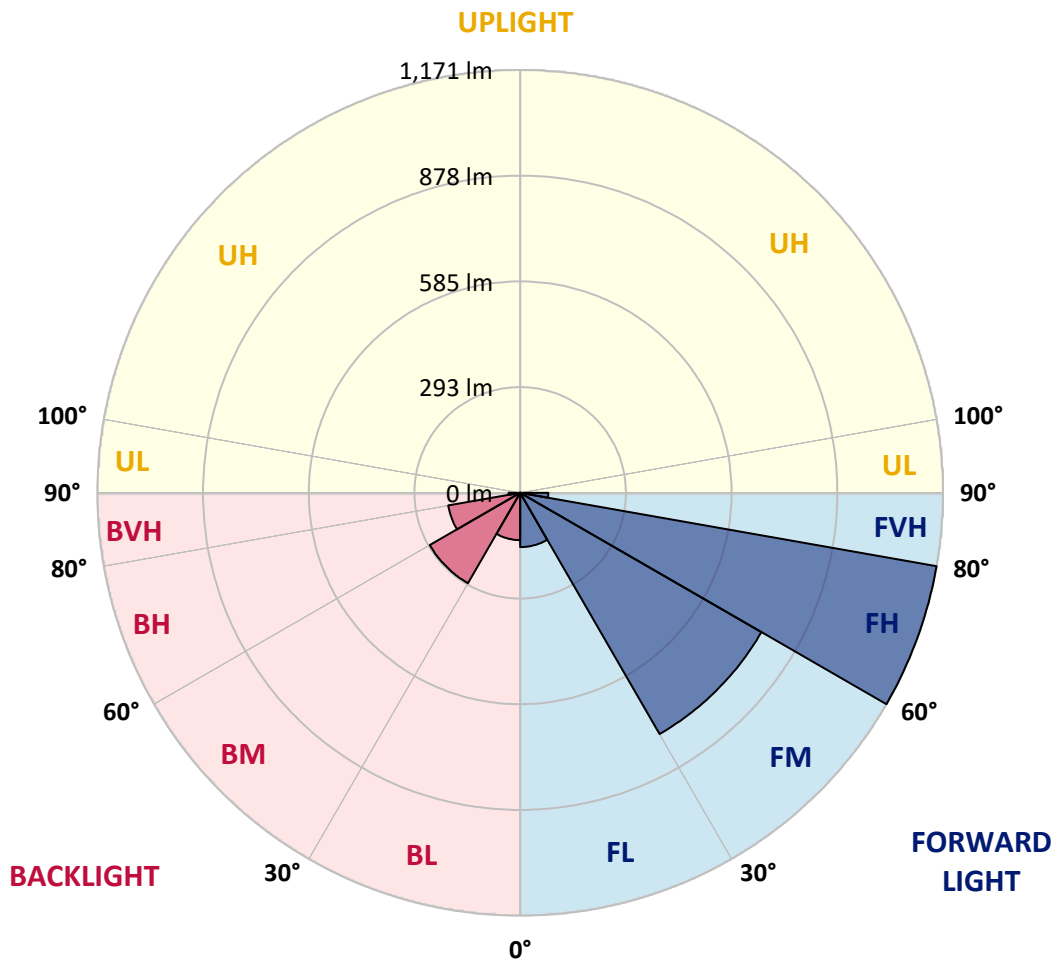
CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	150.2	5.3			
FM	(30°-60°)	771.5	27.3			
FH	(60°-80°)	1171.0	41.5			G1/1800
FVH	(80°-90°)	77.9	2.8			G1/100
BL	(0°-30°)	131.1	4.6	B1/500		
BM	(30°-60°)	289.2	10.2	B1/1000		
BH	(60°-80°)	202.2	7.2	B1/500		G1/500
BVH	(80°-90°)	31.9	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Medium





REPORT NUMBER: P214881

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6
2.5°	303.9	301.7	301.7	300.0	300.0	297.3	296.2	295.6	292.9	291.3	289.6
5°	321.5	318.7	318.2	314.3	312.7	306.6	306.1	302.2	297.3	292.4	288.5
7.5°	337.4	335.8	333.0	329.2	324.2	316.5	316.0	309.9	301.7	295.1	289.6
10°	349.0	347.9	344.0	339.1	333.6	325.9	325.3	318.7	308.8	301.1	293.4
12.5°	362.7	361.0	356.1	349.5	343.5	336.3	335.8	330.3	319.3	309.4	299.5
15°	375.9	373.7	367.6	361.0	354.4	348.4	348.4	342.4	330.8	319.3	307.7
17.5°	382.5	381.4	375.3	368.2	362.7	358.3	357.7	352.2	340.7	328.6	316.0
20°	384.7	385.2	379.7	372.0	368.2	366.0	365.4	361.6	349.0	337.4	325.3
22.5°	384.1	385.8	381.4	373.1	372.0	372.0	372.0	367.6	357.7	346.2	334.1
25°	386.3	388.5	385.2	375.3	375.3	377.5	377.5	375.3	366.5	356.6	344.6
27.5°	394.0	395.7	392.9	379.2	379.7	383.0	382.5	383.0	377.5	368.2	356.1
30°	403.4	405.6	402.3	385.2	384.7	388.0	388.0	390.7	386.9	377.0	367.1
32.5°	428.6	428.1	417.6	391.8	390.2	393.5	393.5	396.2	394.0	386.3	377.0
35°	503.9	495.7	472.6	413.2	396.8	398.4	398.4	403.4	404.5	398.4	390.2
37.5°	580.9	578.1	560.5	470.4	420.9	408.9	408.3	415.4	420.4	415.4	409.9
40°	658.3	656.1	652.3	546.8	471.5	427.5	425.9	431.9	440.7	437.4	434.1
42.5°	730.3	729.2	733.1	622.1	535.8	467.7	462.7	455.6	468.2	467.1	467.1
45°	786.9	789.7	791.9	692.4	605.6	519.3	513.3	489.1	506.1	510.5	513.8
47.5°	818.8	821.0	828.7	761.1	675.4	579.2	574.8	535.2	557.8	571.0	580.3
50°	864.4	858.4	865.0	828.1	759.5	657.2	645.1	597.3	625.9	649.0	671.0
52.5°	908.4	898.5	904.0	905.6	855.1	733.6	721.0	670.4	706.1	742.4	781.4
55°	947.9	947.4	952.9	980.9	947.4	815.5	801.2	751.2	802.9	841.9	907.8
57.5°	979.8	985.3	1009.5	1068.3	1054.0	904.5	888.6	845.2	906.2	945.2	1054.5
60°	1017.2	1026.0	1066.1	1142.5	1151.3	997.9	981.5	950.1	1012.2	1051.8	1224.4
62.5°	1029.8	1042.5	1124.9	1220.5	1252.9	1100.2	1085.3	1064.4	1123.8	1159.5	1393.6
65°	945.7	969.9	1157.3	1260.6	1362.3	1223.3	1210.6	1192.5	1234.8	1258.4	1508.5
67.5°	922.7	933.7	1094.1	1318.3	1465.0	1381.5	1368.9	1337.6	1338.7	1328.8	1545.8
70°	890.2	902.3	1029.3	1361.7	1612.3	1598.0	1582.6	1490.3	1433.7	1373.8	1472.2
72.5°	758.4	754.5	886.9	1244.7	1683.2	1866.2	1848.1	1654.6	1504.1	1334.8	1242.5
75°	425.9	414.9	538.0	861.1	1537.0	1972.8	1972.3	1737.6	1454.6	1162.8	845.7
77.5°	123.6	120.3	177.5	361.0	1034.8	1714.0	1734.9	1567.3	1213.9	835.3	464.4
80°	58.3	59.3	76.4	119.2	441.8	1106.2	1166.1	1032.0	725.4	385.2	191.8
82.5°	36.8	37.4	52.2	76.9	186.8	502.3	551.7	464.4	287.4	166.5	84.6
85°	23.1	23.1	34.6	50.6	111.6	160.5	174.2	158.3	123.1	90.7	46.2
87.5°	12.6	12.6	20.9	29.1	61.0	51.7	53.3	63.2	76.9	55.5	23.1
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: P214881

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6	289.6
2.5°	289.1	288.0	286.3	285.8	285.2	284.7	285.2	286.3	285.2	285.2	285.8
5°	287.4	286.3	284.1	284.1	284.7	285.2	288.0	289.6	290.2	290.2	290.2
7.5°	287.4	285.8	284.1	284.7	285.8	288.0	292.4	295.1	297.3	297.8	297.8
10°	290.2	288.0	286.9	288.0	291.3	292.9	297.3	301.7	304.4	305.5	305.5
12.5°	295.1	292.9	292.9	295.1	299.5	301.7	305.5	308.8	312.1	313.8	313.8
15°	303.3	300.6	301.1	305.0	309.9	312.1	314.9	316.0	318.7	320.9	320.9
17.5°	311.0	308.3	309.4	313.8	317.1	318.2	319.8	319.3	320.4	322.0	322.6
20°	319.8	317.1	317.6	320.4	320.9	319.8	319.8	318.2	317.6	320.4	321.5
22.5°	328.6	325.9	325.3	323.7	320.9	318.2	316.5	314.9	313.8	316.5	317.6
25°	339.1	335.2	332.5	325.3	318.2	313.2	311.0	309.9	309.4	312.1	313.2
27.5°	350.6	346.8	338.5	323.1	311.6	303.3	301.7	301.7	302.8	304.4	305.5
30°	361.6	357.7	342.9	318.2	300.0	288.0	286.3	288.0	290.7	292.4	294.0
32.5°	372.6	368.7	345.7	310.5	283.0	267.6	266.5	269.3	273.7	274.8	275.9
35°	387.4	383.6	349.0	299.5	261.6	245.1	244.0	245.6	249.5	251.1	252.8
37.5°	408.3	406.1	353.9	287.4	241.8	223.7	220.4	219.3	221.5	220.9	223.1
40°	435.8	437.4	362.7	271.5	222.6	203.9	196.7	193.4	191.2	186.8	189.0
42.5°	475.9	477.0	372.6	253.3	206.1	185.2	175.8	169.8	165.4	158.3	159.4
45°	534.7	525.4	384.1	234.1	191.2	170.4	159.4	152.2	146.2	140.1	140.7
47.5°	612.7	584.2	396.8	218.2	176.4	158.3	148.4	140.1	133.0	128.0	128.6
50°	708.9	657.2	409.4	203.3	161.6	148.9	140.1	131.3	124.2	119.2	118.7
52.5°	835.8	745.2	417.6	186.8	146.7	140.7	133.0	124.7	116.0	109.9	109.4
55°	967.7	847.4	424.8	167.1	132.4	131.3	127.5	118.1	107.7	100.0	98.9
57.5°	1112.8	956.7	430.3	147.8	121.4	123.6	122.5	111.6	100.0	92.9	92.3
60°	1244.7	1069.9	412.7	130.8	111.6	116.0	117.1	107.7	101.7	103.3	103.9
62.5°	1377.7	1157.3	345.7	118.1	105.0	111.0	120.3	119.8	117.1	119.8	120.3
65°	1425.5	1175.4	245.1	107.7	98.4	113.2	130.8	129.7	117.1	112.1	111.0
67.5°	1398.6	1121.6	164.9	99.5	93.4	116.0	141.8	129.7	112.7	106.1	103.9
70°	1270.5	989.2	120.9	91.2	89.0	115.4	147.8	129.1	110.5	103.3	100.6
72.5°	1013.3	763.3	97.3	83.5	82.4	112.7	151.1	128.0	108.3	100.6	97.3
75°	656.1	474.8	81.9	75.8	72.5	108.3	149.5	124.7	105.5	95.6	93.4
77.5°	304.4	204.4	69.8	67.0	63.2	101.7	144.5	118.1	99.5	90.1	87.4
80°	141.8	96.7	58.8	58.3	56.6	96.2	137.9	110.5	92.3	84.6	80.2
82.5°	75.8	58.3	47.8	47.8	49.5	89.6	129.7	101.1	83.0	79.1	67.6
85°	40.1	33.5	34.6	37.4	42.3	79.1	118.7	91.2	72.5	60.4	58.8
87.5°	20.3	21.4	21.4	25.3	32.4	64.3	97.8	75.3	61.5	49.5	48.4
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)