

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: P398127

Luminaire Tested: **ARCH-S-PA1-90-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398127
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7482 lumens
Efficiency: N/A
Efficacy: 79.6 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 - G2

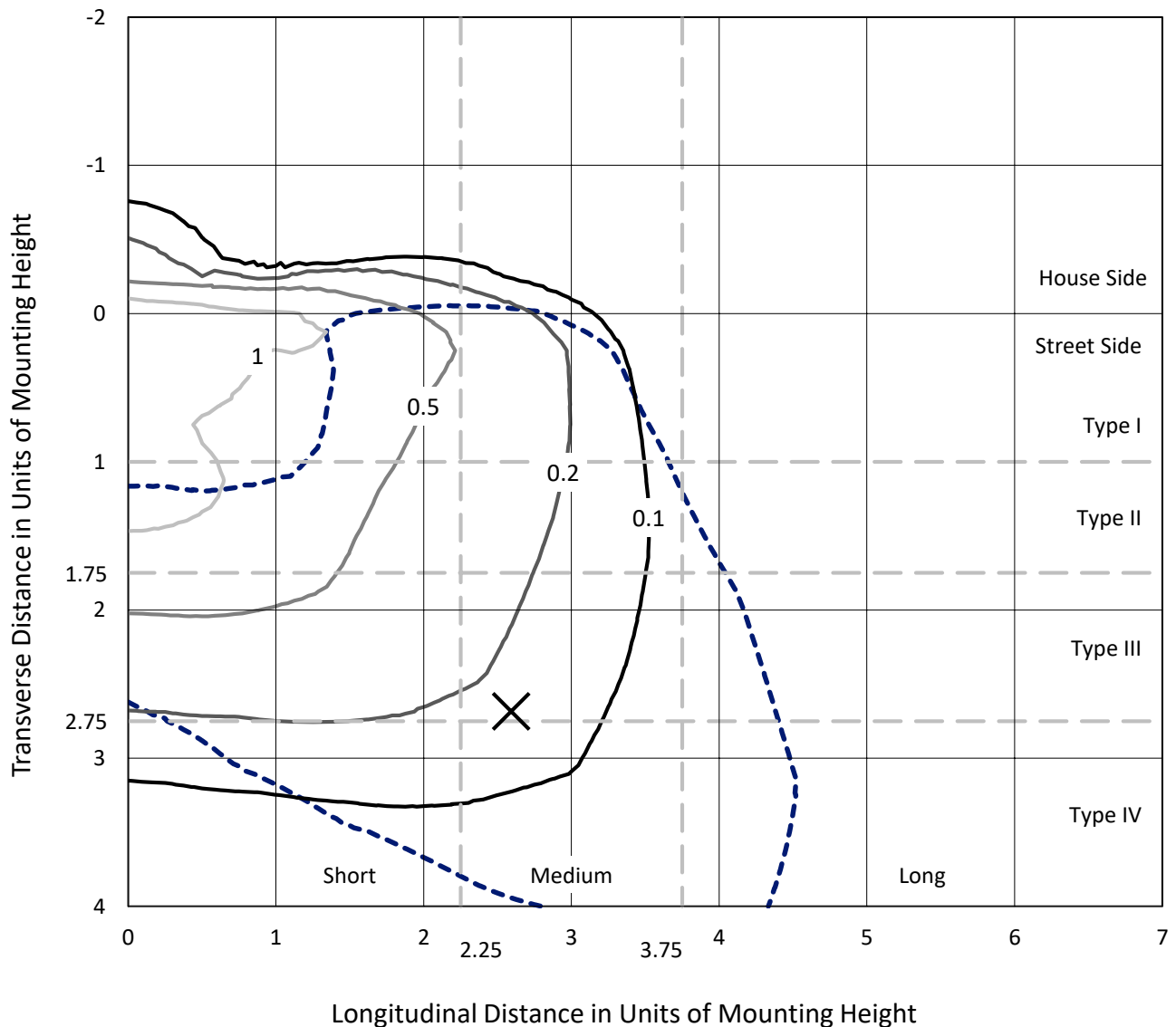
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398127
 CATALOG NUMBER: ARCH-S-PA1-90-730-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

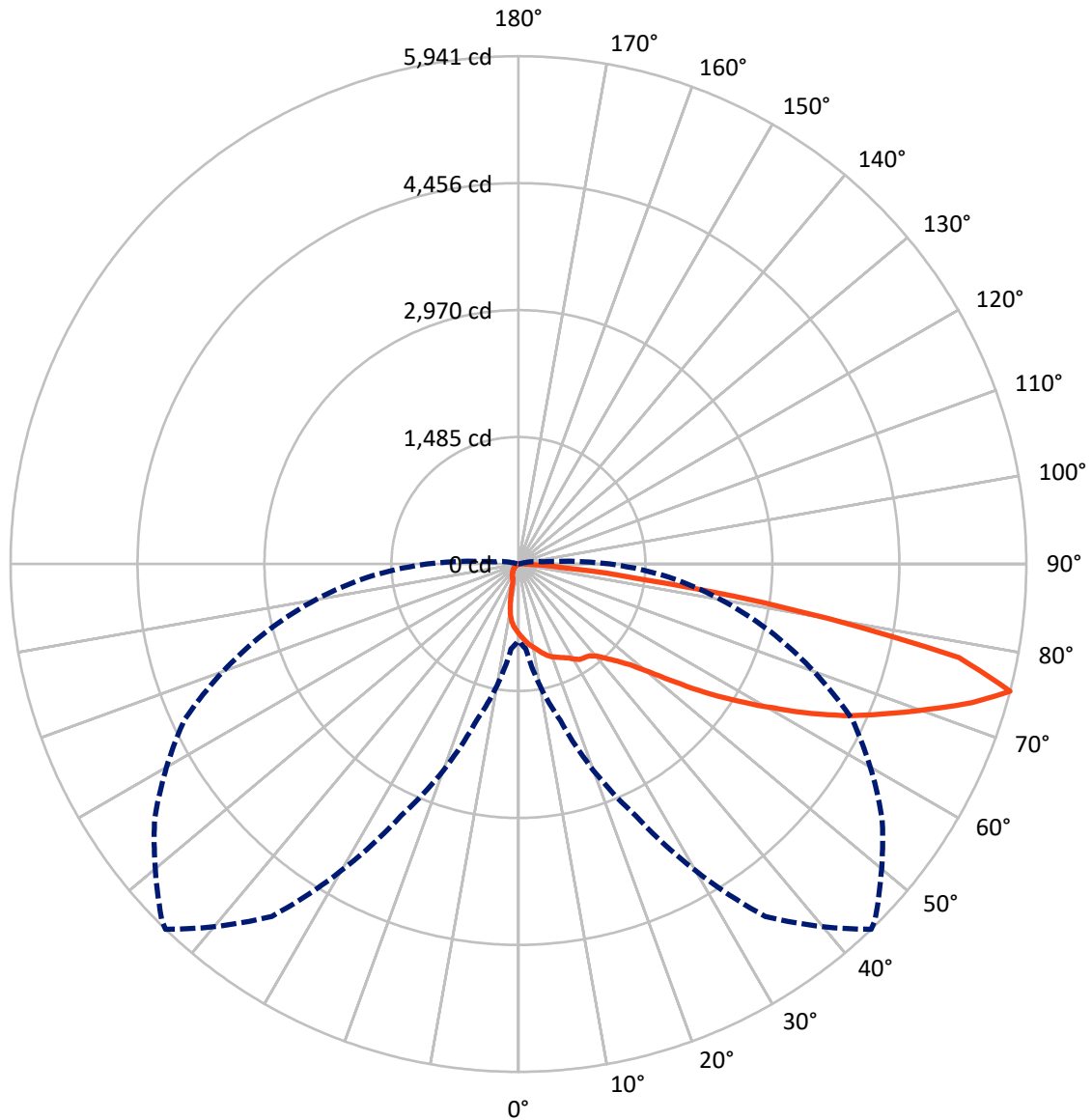


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398127

CATALOG NUMBER: ARCH-S-PA1-90-730-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P398127

CATALOG NUMBER: ARCH-S-PA1-90-730-U-T4W-HSS

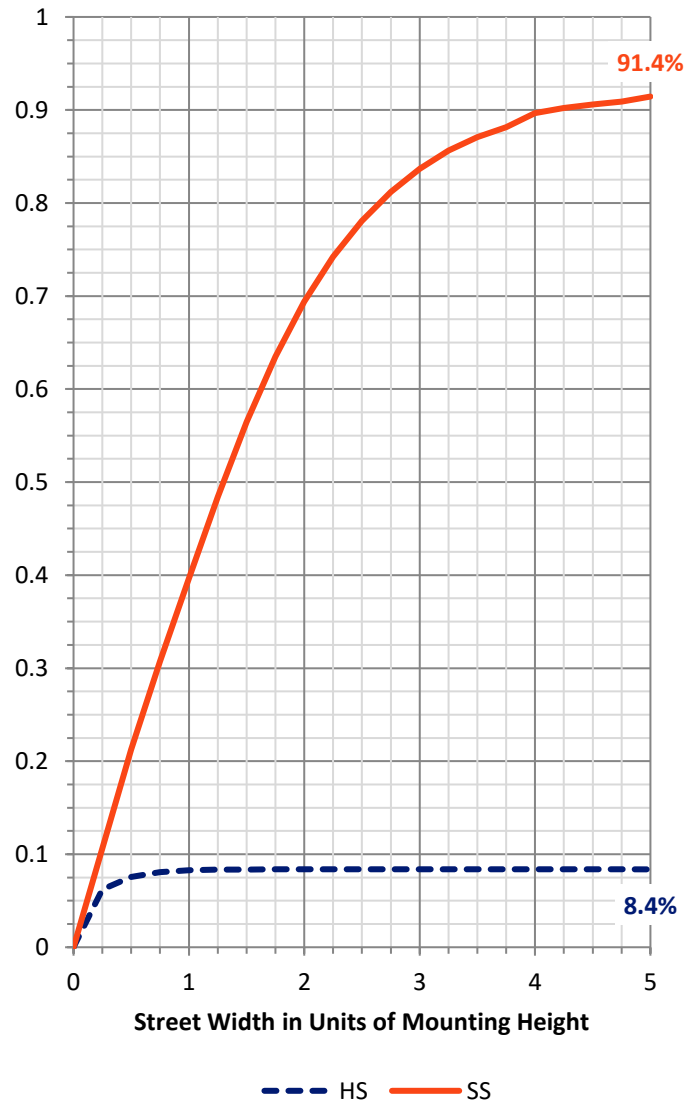
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	631.0	0.0	631.0
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6851.0	0.0	6851.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	7482.0	0.0	7482.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	1.0
10°-20°	215.2	2.9
20°-30°	355.2	4.7
30°-40°	515.5	6.9
40°-50°	837.9	11.2
50°-60°	1477.2	19.7
60°-70°	2123.0	28.4
70°-80°	1700.1	22.7
80°-90°	181.1	2.4
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°	7482.0	100.0
0°-180°	7482.0	100.0



REPORT NUMBER: P398127

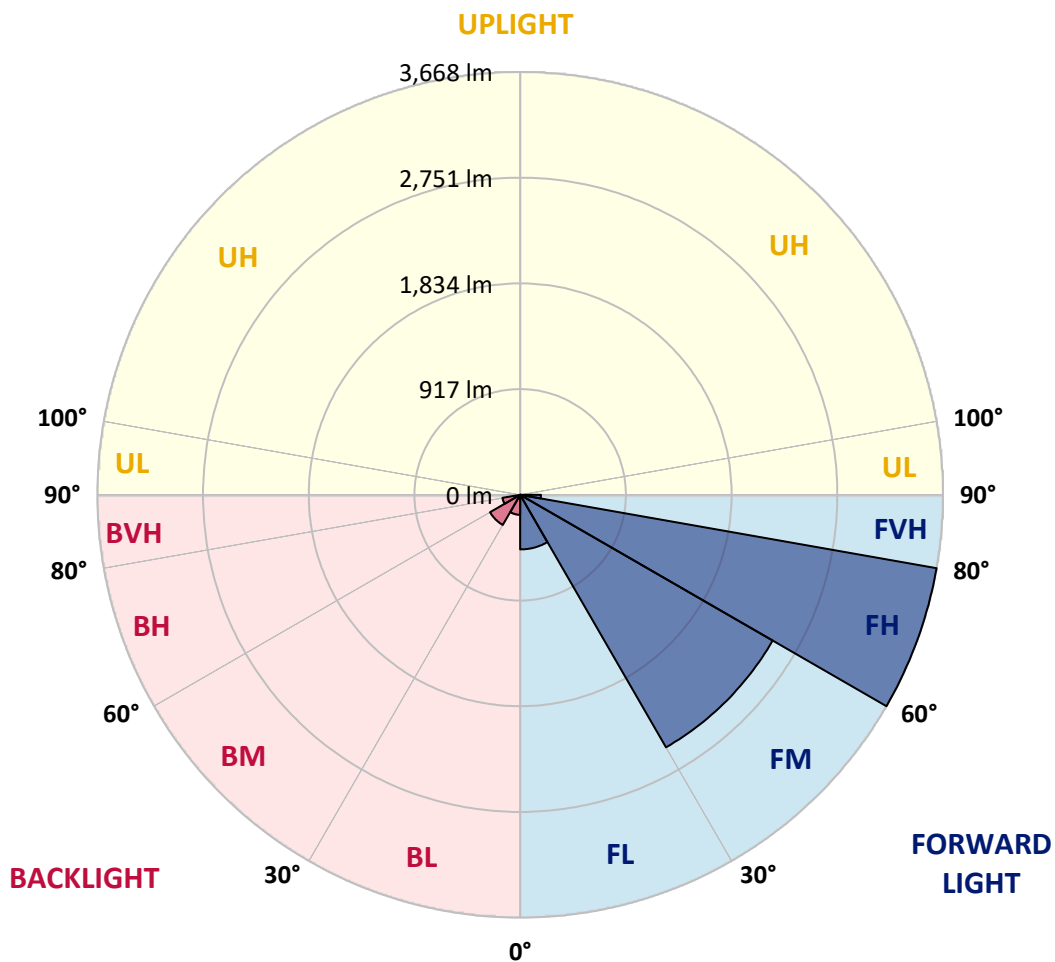
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	473.8	6.3			
FM	(30°-60°)	2529.0	33.8			
FH	(60°-80°)	3667.5	49.0			G2/5000
FVH	(80°-90°)	180.7	2.4			G2/225
BL	(0°-30°)	173.4	2.3	B1/500		
BM	(30°-60°)	301.6	4.0	B1/1000		
BH	(60°-80°)	155.6	2.1	B1/500		G1/500
BVH	(80°-90°)	0.5	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 IV Medium





REPORT NUMBER: P398127

CATALOG NUMBER: ARCH-S-PA1-90-730-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4
2.5°	887.5	886.2	882.0	875.1	868.2	861.3	859.9	848.9	836.5	826.8	818.5
5°	966.2	964.8	957.9	942.8	927.6	909.6	908.2	882.0	858.6	832.3	810.2
7.5°	1047.7	1044.9	1032.5	1009.0	982.8	955.2	952.4	913.8	879.3	844.8	813.0
10°	1111.2	1108.4	1090.5	1062.8	1027.0	992.4	988.3	948.3	913.8	869.6	826.8
12.5°	1173.3	1167.7	1144.3	1113.9	1069.7	1036.6	1032.5	991.1	949.7	904.1	851.7
15°	1231.2	1224.3	1202.3	1163.6	1116.7	1084.9	1082.2	1038.0	995.2	942.8	884.8
17.5°	1271.3	1268.5	1242.3	1199.5	1153.9	1127.7	1125.0	1079.4	1036.6	981.4	919.3
20°	1292.0	1292.0	1267.1	1220.2	1178.8	1160.8	1156.7	1113.9	1072.5	1020.1	955.2
22.5°	1296.1	1300.3	1280.9	1229.9	1199.5	1184.3	1181.6	1144.3	1104.3	1055.9	995.2
25°	1304.4	1304.4	1294.7	1239.5	1217.4	1213.3	1211.9	1178.8	1142.9	1094.6	1035.2
27.5°	1314.1	1314.1	1307.2	1253.3	1245.0	1243.7	1242.3	1227.1	1198.1	1141.5	1082.2
30°	1338.9	1340.3	1334.8	1280.9	1275.4	1290.6	1293.4	1285.1	1249.2	1178.8	1130.5
32.5°	1401.0	1388.6	1373.4	1300.3	1309.9	1329.2	1330.6	1314.1	1275.4	1218.8	1188.5
35°	1557.0	1483.8	1414.8	1316.8	1321.0	1340.3	1343.0	1341.7	1318.2	1269.9	1254.7
37.5°	1701.9	1598.4	1500.4	1355.5	1341.7	1362.4	1367.9	1391.4	1373.4	1340.3	1344.4
40°	1786.1	1746.1	1677.1	1461.8	1383.1	1414.8	1420.3	1456.2	1449.3	1435.5	1461.8
42.5°	2045.6	2048.4	1973.9	1620.5	1459.0	1510.1	1517.0	1546.0	1555.6	1562.5	1626.0
45°	2346.5	2356.2	2338.3	1906.2	1602.5	1619.1	1628.8	1667.4	1703.3	1747.5	1863.4
47.5°	2708.2	2699.9	2633.6	2255.4	1852.4	1759.9	1766.8	1841.3	1903.5	2000.1	2165.7
50°	3028.4	3049.1	2923.5	2581.2	2204.4	1982.1	1975.2	2048.4	2160.2	2295.5	2503.9
52.5°	3351.4	3321.0	3151.3	2904.2	2621.2	2284.4	2263.7	2303.7	2461.1	2621.2	2835.2
55°	3437.0	3439.8	3381.8	3257.5	2969.1	2651.6	2617.1	2614.3	2810.3	2919.4	3183.0
57.5°	3605.4	3612.3	3626.1	3650.9	3514.3	3018.8	2982.9	2944.2	3134.7	3198.2	3532.2
60°	3776.5	3784.8	3869.0	4002.9	3911.8	3414.9	3376.3	3285.2	3391.4	3477.0	3899.4
62.5°	3754.5	3812.4	4056.8	4323.2	4312.1	3849.7	3801.4	3581.9	3649.6	3724.1	4236.2
65°	3390.1	3452.2	4001.5	4411.5	4713.8	4279.0	4200.3	3888.4	3892.5	3982.2	4560.6
67.5°	3064.3	3131.9	3656.5	4374.2	4978.8	4664.1	4582.7	4196.2	4131.3	4280.4	4734.5
70°	2876.6	2944.2	3381.8	4258.3	5053.3	5090.6	5020.2	4548.1	4415.6	4552.3	4539.9
72.5°	2251.3	2357.6	3031.2	4037.4	5133.4	5547.5	5492.3	4994.0	4657.2	4267.9	3456.3
75°	897.2	995.2	1892.4	3249.3	5032.6	5940.9	5898.1	5194.1	4310.7	3047.7	1769.6
77.5°	270.5	289.9	525.9	1606.7	3689.6	5267.3	5253.5	4367.3	3050.5	1414.8	483.1
80°	89.7	99.4	161.5	443.1	1684.0	3290.7	3352.8	2782.7	1385.8	324.4	98.0
82.5°	37.3	41.4	81.4	178.1	596.3	1417.6	1396.9	1246.4	483.1	201.5	35.9
85°	9.7	12.4	37.3	102.1	218.1	488.6	513.5	418.2	273.3	167.0	11.0
87.5°	0.0	0.0	17.9	41.4	98.0	147.7	154.6	127.0	154.6	125.6	5.5
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: P398127

CATALOG NUMBER: ARCH-S-PA1-90-730-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4	814.4
2.5°	811.6	804.7	792.3	784.0	773.0	770.2	764.7	757.8	756.4	749.5	750.9
5°	797.8	786.8	764.7	749.5	731.6	726.0	716.4	709.5	704.0	694.3	695.7
7.5°	795.1	778.5	748.1	719.1	690.2	669.5	640.5	617.0	597.7	577.0	581.1
10°	804.7	784.0	741.2	701.2	648.7	582.5	506.6	456.9	432.0	407.2	410.0
12.5°	824.0	799.2	744.0	683.3	577.0	463.8	358.9	291.2	273.3	262.3	263.6
15°	853.0	822.7	752.3	648.7	480.4	335.4	238.8	209.8	216.7	220.9	220.9
17.5°	883.4	848.9	759.2	586.6	371.3	234.7	194.6	191.9	201.5	211.2	211.2
20°	920.7	876.5	760.6	508.0	267.8	190.5	183.6	183.6	190.5	201.5	201.5
22.5°	956.6	906.9	748.1	418.2	204.3	176.7	176.7	176.7	180.8	191.9	193.2
25°	999.3	944.1	721.9	323.0	175.3	168.4	168.4	169.8	172.5	182.2	183.6
27.5°	1044.9	982.8	677.7	236.0	160.1	158.7	160.1	161.5	162.9	172.5	175.3
30°	1097.4	1025.6	621.1	176.7	146.3	146.3	150.5	153.2	153.2	161.5	164.3
32.5°	1158.1	1082.2	553.5	146.3	132.5	131.1	138.0	142.2	142.2	149.1	151.8
35°	1234.0	1140.1	472.1	129.7	121.5	118.7	121.5	128.4	131.1	136.7	138.0
37.5°	1334.8	1209.2	385.1	120.1	113.2	107.7	107.7	109.0	114.6	120.1	121.5
40°	1463.1	1285.1	299.5	113.2	104.9	99.4	95.2	93.9	92.5	96.6	99.4
42.5°	1624.6	1370.7	223.6	106.3	98.0	89.7	84.2	78.7	71.8	70.4	71.8
45°	1831.7	1475.6	165.6	100.8	93.9	81.4	71.8	62.1	49.7	45.6	46.9
47.5°	2076.0	1584.6	129.7	95.2	91.1	71.8	59.4	42.8	30.4	27.6	29.0
50°	2335.5	1689.5	110.4	88.3	85.6	62.1	42.8	26.2	17.9	17.9	19.3
52.5°	2556.3	1748.9	100.8	82.8	77.3	51.1	27.6	15.2	11.0	11.0	12.4
55°	2770.3	1780.6	93.9	77.3	66.3	35.9	15.2	9.7	6.9	6.9	6.9
57.5°	2991.1	1794.4	85.6	70.4	52.5	22.1	8.3	5.5	4.1	4.1	4.1
60°	3187.2	1768.2	73.2	58.0	34.5	11.0	4.1	4.1	2.8	1.4	1.4
62.5°	3351.4	1718.5	51.1	41.4	20.7	5.5	2.8	1.4	0.0	0.0	0.0
65°	3452.2	1638.4	33.1	27.6	12.4	4.1	1.4	0.0	0.0	0.0	0.0
67.5°	3423.2	1488.0	20.7	17.9	5.5	2.8	1.4	0.0	0.0	0.0	0.0
70°	3089.2	1220.2	15.2	11.0	4.1	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	2226.5	825.4	11.0	6.9	2.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1071.1	294.0	6.9	5.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	262.3	64.9	4.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.0	12.4	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.3	5.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.9	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	1.4	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)