

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: LUMARK

Report Number: P881700

Luminaire Tested: **NAV-SB1B-722-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881700
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-722-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3400 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

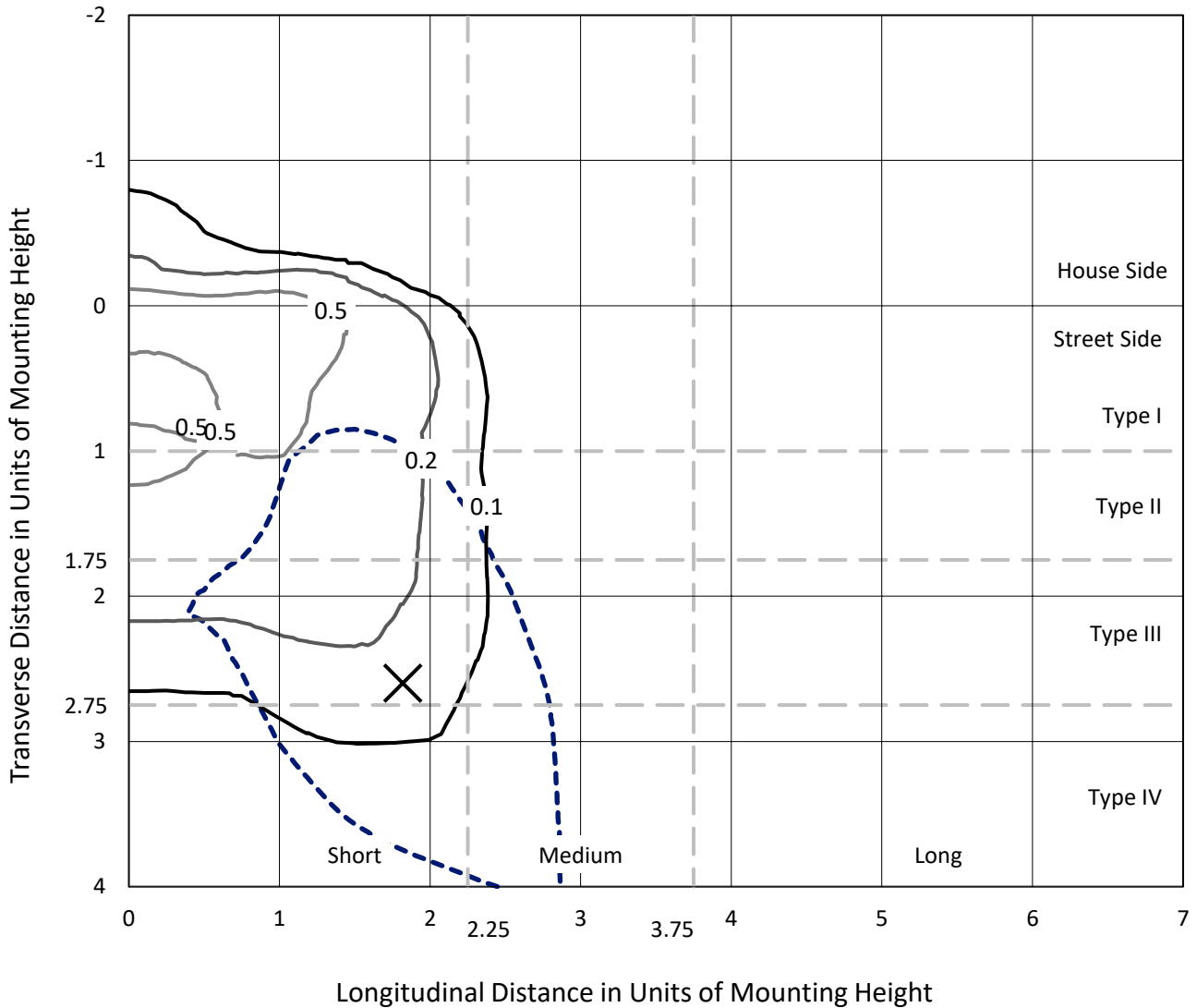
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881700
 CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

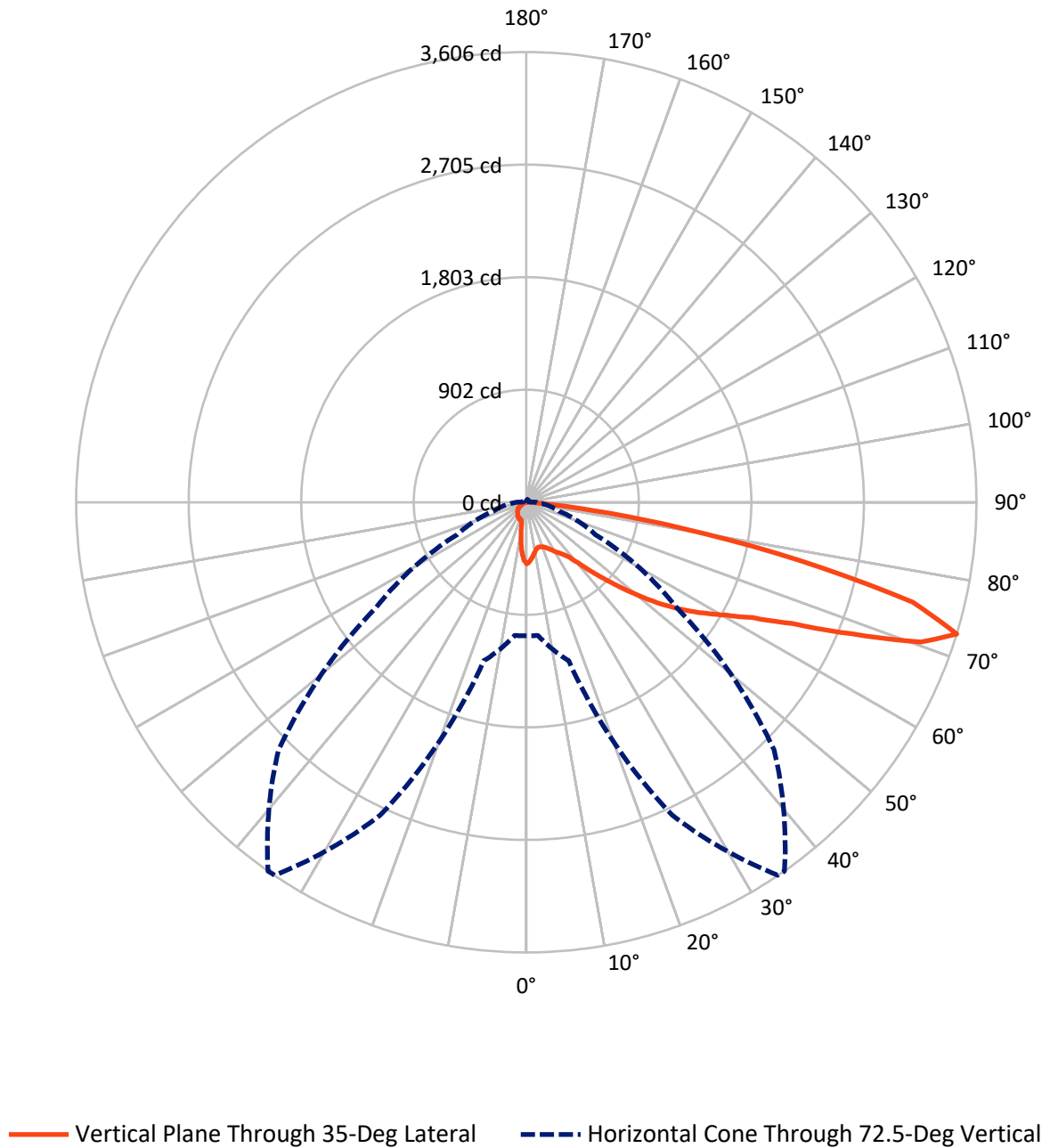
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P881700
CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P881700
 CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	382.7	0.0	382.7
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3017.3	0.0	3017.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	3400.0	0.0	3400.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	1.2
10°-20°	94.7	2.8
20°-30°	153.9	4.5
30°-40°	256.8	7.6
40°-50°	485.8	14.3
50°-60°	771.9	22.7
60°-70°	954.9	28.1
70°-80°	593.6	17.5
80°-90°	48.0	1.4
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°	3400.0	100.0
0°-180°	3400.0	100.0

Coefficient of Utilization



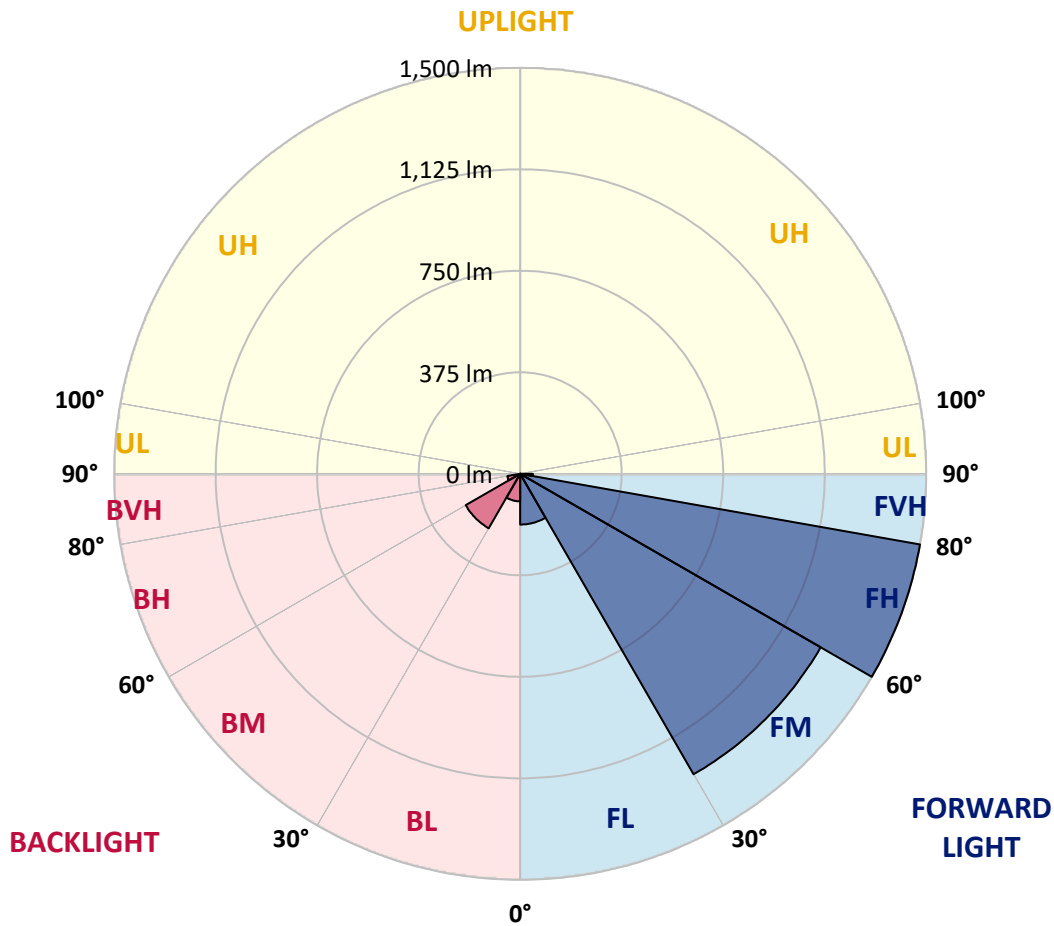
REPORT NUMBER: P881700
 CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	187.4	5.5			
FM (30°-60°)	1282.1	37.7			
FH (60°-80°)	1500.5	44.1			G1/1800
FVH (80°-90°)	47.3	1.4			G1/100
BL (0°-30°)	101.7	3.0	B0/110		
BM (30°-60°)	232.3	6.8	B1/1000		
BH (60°-80°)	48.0	1.4	B0/110		G0/110
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-G1

Type IV Short



REPORT NUMBER: P881700

CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	470.9	474.8	475.6	476.8	476.8	478.3	480.8	484.3	490.0	493.0	495.0
5°	434.0	437.0	440.7	443.7	449.4	450.2	459.9	469.4	482.6	492.5	499.5
7.5°	396.9	400.3	405.3	412.6	420.0	422.3	437.0	452.9	473.8	492.5	504.2
10°	370.7	371.0	375.4	382.7	394.6	397.4	415.3	438.0	464.1	489.5	508.7
12.5°	356.0	357.7	359.7	365.2	376.7	378.4	397.6	424.3	454.4	487.8	513.9
15°	356.0	357.2	358.5	361.2	370.5	371.9	388.9	415.5	449.4	488.5	522.4
17.5°	359.7	361.7	360.7	364.0	373.7	374.7	389.6	413.1	449.2	493.3	535.4
20°	368.7	370.2	368.2	370.2	379.9	381.9	397.4	417.8	453.4	501.5	551.6
22.5°	382.9	383.7	378.9	380.4	390.4	392.9	410.8	431.2	463.6	514.7	573.2
25°	400.8	402.3	395.1	396.9	406.3	409.3	430.0	451.4	479.8	532.9	600.9
27.5°	421.5	422.3	416.0	415.8	428.0	432.2	453.2	476.3	501.5	555.8	635.8
30°	445.2	447.4	441.5	440.5	455.9	459.4	480.1	507.0	533.4	590.2	685.3
32.5°	463.9	465.6	462.1	464.6	480.3	483.1	512.7	550.3	583.5	639.0	752.9
35°	490.8	491.8	483.8	488.3	506.2	513.2	557.3	611.1	646.5	700.3	841.1
37.5°	588.2	588.2	554.3	532.1	549.3	555.6	618.3	687.6	724.2	782.5	952.2
40°	723.0	720.7	671.1	625.8	623.6	635.8	705.3	784.0	824.6	881.2	1077.2
42.5°	866.7	863.2	795.7	750.9	743.4	747.6	805.7	902.8	944.2	1001.5	1211.8
45°	994.3	993.3	931.5	871.2	857.7	871.2	931.0	1041.9	1071.5	1131.8	1346.0
47.5°	1101.1	1101.1	1056.1	1016.7	1009.7	1017.7	1100.6	1196.1	1193.3	1270.5	1476.8
50°	1224.2	1223.2	1180.4	1163.4	1170.6	1181.9	1296.0	1358.5	1319.4	1406.8	1593.7
52.5°	1310.4	1316.4	1301.7	1299.0	1335.8	1355.3	1494.3	1517.4	1432.2	1536.1	1681.1
55°	1378.7	1385.6	1402.6	1421.8	1492.8	1518.2	1686.3	1668.2	1526.7	1648.2	1731.4
57.5°	1475.3	1465.4	1491.5	1529.4	1644.2	1674.9	1872.4	1810.4	1602.6	1739.2	1736.9
60°	1592.7	1594.2	1598.7	1646.5	1795.5	1834.8	2055.8	1944.9	1651.5	1795.0	1676.1
62.5°	1733.7	1735.9	1745.1	1818.6	1998.5	2035.6	2251.1	2055.1	1673.9	1779.3	1519.2
65°	1724.0	1733.4	1836.3	2087.7	2307.2	2343.8	2479.1	2132.3	1640.0	1635.8	1236.9
67.5°	1570.5	1585.9	1758.1	2409.1	2772.5	2813.4	2754.6	2147.5	1493.8	1272.0	806.9
70°	1369.2	1374.7	1581.7	2698.0	3311.4	3352.8	3001.2	1980.3	1133.5	709.5	361.5
72.5°	1069.3	1070.5	1313.4	2765.1	3603.9	3606.1	2807.7	1470.1	609.6	272.5	125.6
75°	763.8	756.4	879.7	2242.4	3170.6	3196.1	2104.9	689.6	232.9	128.8	62.5
77.5°	409.6	417.8	497.8	1329.8	2190.3	2233.7	1148.5	198.8	118.6	87.7	41.4
80°	126.6	133.5	204.0	608.9	1240.7	1266.8	425.8	88.4	82.7	62.5	27.2
82.5°	39.9	41.4	95.2	255.9	514.9	526.9	123.3	50.1	56.6	41.4	15.9
85°	11.5	11.7	42.4	95.4	127.3	129.8	34.6	19.4	32.4	25.7	8.2
87.5°	1.2	4.0	15.9	15.9	11.2	11.0	3.7	4.2	9.2	3.2	1.5
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: P881700

CATALOG NUMBER: NAV-SB1B-722-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	493.8	494.0	490.8	485.3	479.3	474.3	468.1	463.1	459.6	458.6	460.4
5°	497.3	495.5	486.3	469.6	449.7	432.5	413.3	398.1	388.1	383.9	385.4
7.5°	502.5	497.5	477.3	444.4	406.3	372.4	338.1	311.4	294.5	286.0	287.2
10°	507.0	497.0	462.4	408.1	349.8	298.5	252.1	220.0	202.0	193.6	193.8
12.5°	511.2	496.8	442.9	365.0	286.0	223.2	180.1	164.2	159.2	157.4	157.0
15°	519.2	497.5	418.5	315.6	222.5	168.7	153.0	152.7	153.7	153.2	153.0
17.5°	530.1	498.3	390.9	263.3	171.6	148.7	148.0	150.2	151.7	151.0	150.7
20°	544.3	501.2	361.5	211.5	147.5	143.7	145.5	147.5	148.7	147.5	147.2
22.5°	564.3	506.5	329.3	169.9	139.8	140.8	142.3	144.5	145.7	144.0	143.7
25°	588.7	514.7	297.7	147.7	136.0	137.3	139.5	142.0	143.5	141.8	141.5
27.5°	620.3	527.9	268.6	142.7	132.3	133.0	136.3	140.0	142.0	139.8	139.8
30°	666.2	549.6	243.4	145.0	130.0	128.3	132.8	138.0	140.3	138.3	138.0
32.5°	727.0	580.2	228.0	148.5	129.0	122.8	127.1	133.8	137.5	136.3	136.3
35°	806.7	626.8	222.0	152.5	128.3	117.1	120.1	127.3	133.8	135.0	135.0
37.5°	903.3	691.6	223.7	154.2	126.1	112.4	113.9	120.1	128.5	132.5	133.5
40°	1013.2	767.1	233.7	152.5	123.6	108.4	108.6	113.4	120.8	126.8	128.8
42.5°	1126.6	855.3	252.1	146.0	121.3	104.9	104.1	107.4	112.4	116.6	118.3
45°	1234.4	945.9	270.3	137.0	118.6	101.4	99.7	100.9	101.9	103.6	104.6
47.5°	1328.6	1009.7	265.1	128.8	114.8	97.4	94.4	93.9	90.9	90.7	90.4
50°	1393.6	1023.7	235.4	120.6	109.4	92.9	88.2	85.2	80.0	77.5	77.7
52.5°	1414.3	968.6	192.3	112.4	100.4	86.9	80.2	75.5	69.0	66.8	66.5
55°	1386.9	860.7	153.7	102.4	87.9	79.0	71.5	65.3	60.0	57.3	57.3
57.5°	1319.9	723.5	121.6	90.7	74.7	70.0	62.5	56.3	51.8	49.1	48.6
60°	1208.8	574.5	96.2	76.7	63.8	60.3	52.6	48.6	44.6	41.4	40.6
62.5°	1040.1	410.1	75.5	60.8	53.3	49.3	44.8	41.9	37.1	32.6	31.9
65°	811.7	250.9	58.3	44.6	42.8	40.9	38.1	35.4	29.6	25.2	24.4
67.5°	512.0	118.8	41.6	33.6	33.9	32.9	31.6	29.4	25.2	21.2	20.7
70°	225.5	57.5	27.4	25.7	25.2	25.2	26.2	25.4	21.4	17.7	16.9
72.5°	76.7	30.9	20.4	19.4	18.2	17.9	21.9	21.2	17.2	13.7	13.0
75°	40.1	20.7	14.9	14.0	11.0	13.2	17.4	16.4	12.2	9.0	8.2
77.5°	26.2	14.7	10.2	9.0	6.2	8.7	13.0	11.5	7.2	4.5	4.0
80°	16.4	9.7	6.0	4.2	3.0	4.7	7.0	5.0	2.7	1.0	0.7
82.5°	8.7	5.0	2.2	1.5	1.2	1.5	1.7	1.2	0.5	0.0	0.0
85°	3.5	1.7	0.7	0.5	0.2	0.0	0.5	0.2	0.0	0.0	0.0
87.5°	1.2	0.2	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)