

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: P882230

Luminaire Tested: **NAV-SB2A-730-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882230
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-SB2A-730-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6814 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

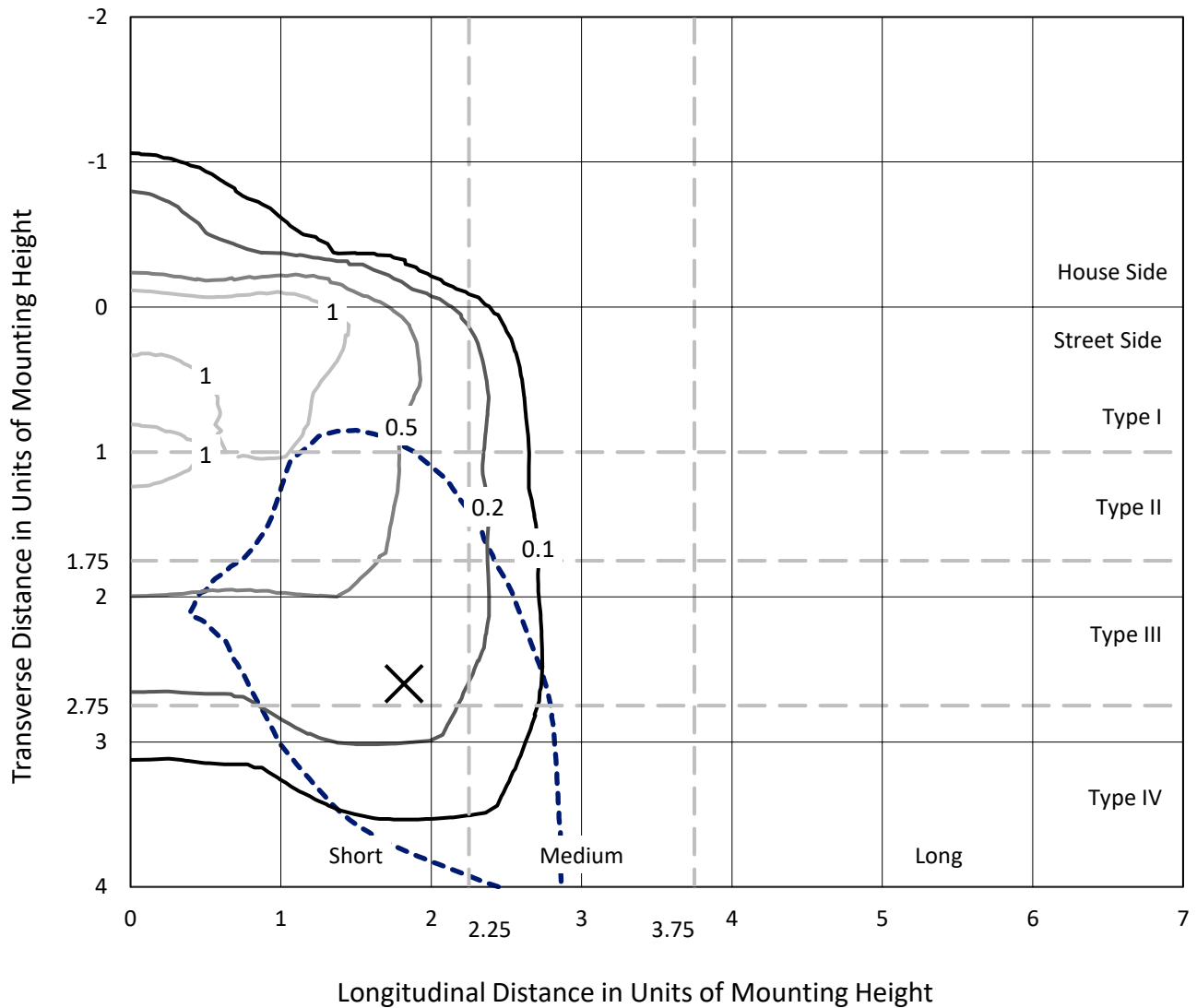
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882230
 CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

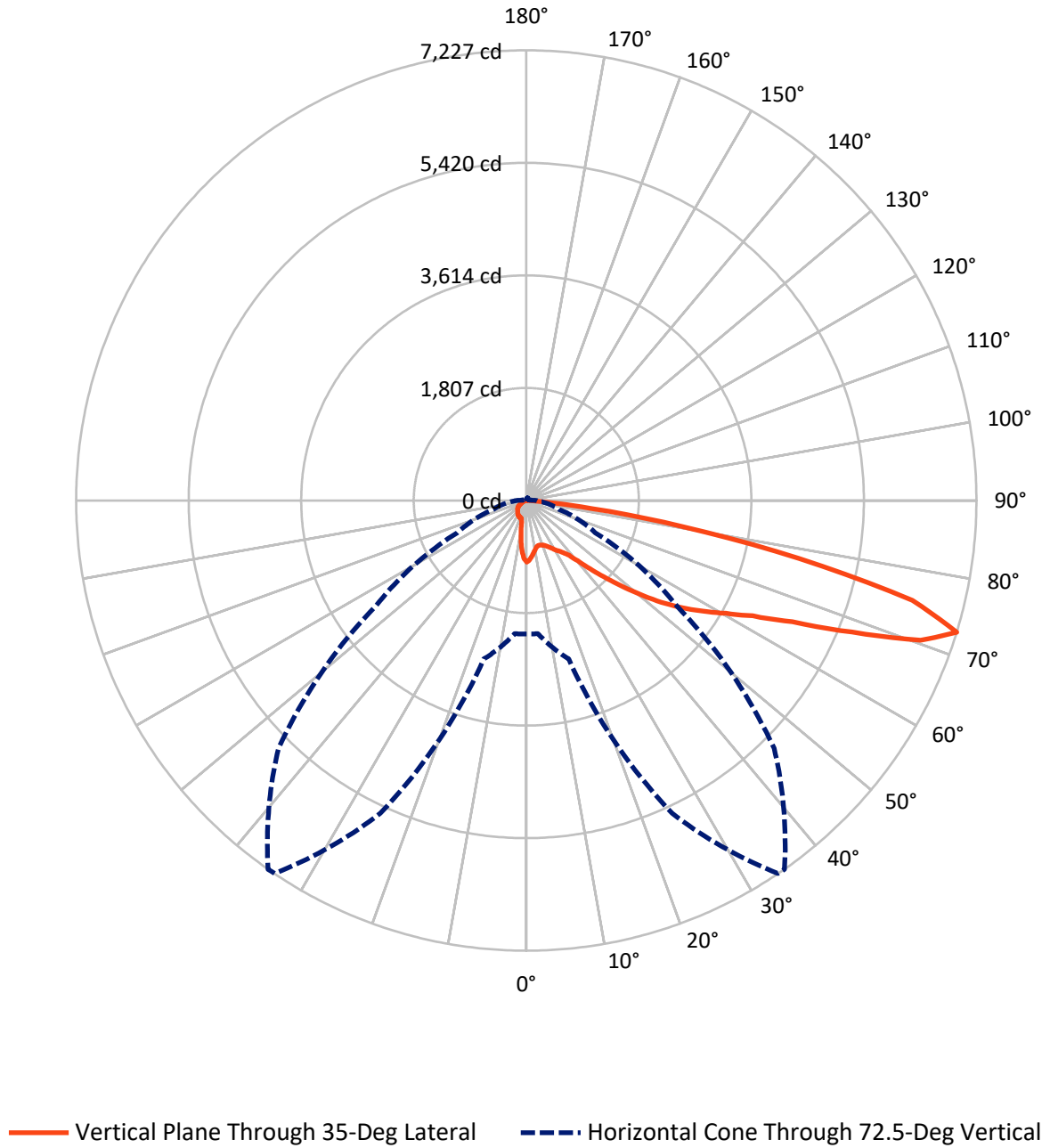
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P882230
CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P882230
 CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	766.9	0.0	766.9
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6047.1	0.0	6047.1
	% Fixture	88.7	0.0	88.7
Total	Lumens	6814.0	0.0	6814.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.2	1.2
10°-20°	189.9	2.8
20°-30°	308.4	4.5
30°-40°	514.6	7.6
40°-50°	973.6	14.3
50°-60°	1547.0	22.7
60°-70°	1913.7	28.1
70°-80°	1189.6	17.5
80°-90°	96.1	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°	6814.0	100.0
0°-180°	6814.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882230

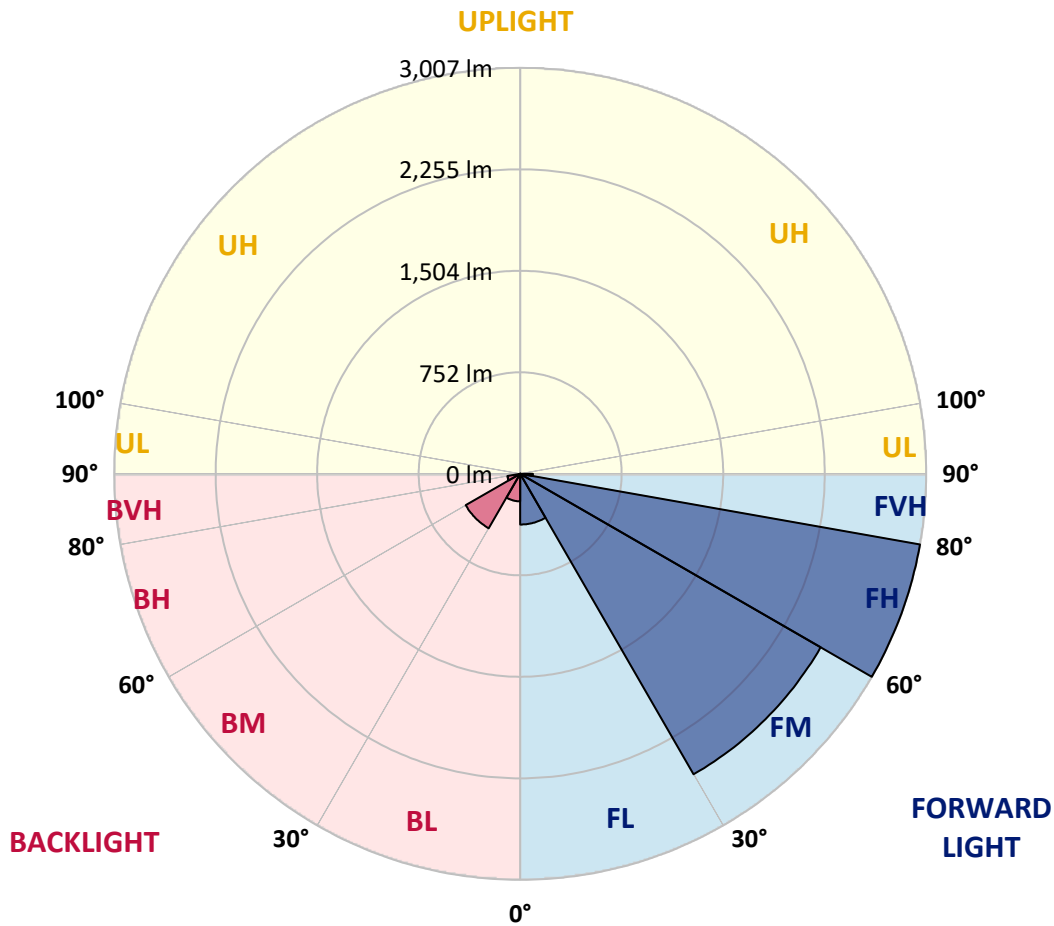
CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	375.6	5.5			
FM (30°-60°)	2569.6	37.7			
FH (60°-80°)	3007.1	44.1			G2/5000
FVH (80°-90°)	94.8	1.4			G1/100
BL (0°-30°)	203.8	3.0	B1/500		
BM (30°-60°)	465.6	6.8	B1/1000		
BH (60°-80°)	96.2	1.4	B0/110		G0/110
BVH (80°-90°)	1.3	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 Short



REPORT NUMBER: P882230
 CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	943.6	951.6	953.1	955.6	955.6	958.6	963.6	970.6	982.1	988.1	992.1
5°	869.7	875.7	883.2	889.2	900.7	902.2	921.7	940.6	967.1	987.1	1001.1
7.5°	795.4	802.3	812.3	826.8	841.8	846.3	875.7	907.7	949.6	987.1	1010.5
10°	742.9	743.4	752.4	766.9	790.9	796.4	832.3	877.7	930.2	981.1	1019.5
12.5°	713.5	717.0	721.0	731.9	754.9	758.4	796.9	850.3	910.7	977.6	1030.0
15°	713.5	716.0	718.5	724.0	742.4	745.4	779.4	832.8	900.7	979.1	1047.0
17.5°	721.0	725.0	723.0	729.4	748.9	750.9	780.9	827.8	900.2	988.6	1073.0
20°	738.9	741.9	737.9	741.9	761.4	765.4	796.4	837.3	908.7	1005.1	1105.4
22.5°	767.4	768.9	759.4	762.4	782.4	787.4	823.3	864.3	929.2	1031.5	1148.8
25°	803.3	806.3	791.9	795.4	814.3	820.3	861.8	904.7	961.6	1068.0	1204.3
27.5°	844.8	846.3	833.8	833.3	857.8	866.3	908.2	954.6	1005.1	1113.9	1274.2
30°	892.2	896.7	884.7	882.7	913.7	920.7	962.1	1016.0	1069.0	1182.8	1373.5
32.5°	929.7	933.2	926.2	931.2	962.6	968.1	1027.5	1102.9	1169.3	1280.7	1508.8
35°	983.6	985.6	969.6	978.6	1014.5	1028.5	1116.9	1224.7	1295.6	1403.5	1685.6
37.5°	1178.8	1178.8	1110.9	1066.5	1100.9	1113.4	1239.2	1378.0	1451.4	1568.2	1908.3
40°	1448.9	1444.4	1345.1	1254.2	1249.7	1274.2	1413.5	1571.2	1652.6	1766.0	2158.9
42.5°	1737.0	1730.0	1594.7	1504.8	1489.9	1498.3	1614.7	1809.4	1892.3	2007.1	2428.5
45°	1992.6	1990.6	1866.8	1746.0	1719.0	1746.0	1865.8	2088.0	2147.4	2268.2	2697.6
47.5°	2206.8	2206.8	2116.5	2037.6	2023.6	2039.6	2205.8	2397.0	2391.6	2546.3	2959.7
50°	2453.5	2451.5	2365.6	2331.6	2346.1	2368.6	2597.3	2722.6	2644.2	2819.4	3193.9
52.5°	2626.2	2638.2	2608.7	2603.2	2677.1	2716.1	2994.7	3041.1	2870.4	3078.6	3369.1
55°	2763.0	2777.0	2810.9	2849.4	2991.7	3042.6	3379.6	3343.2	3059.6	3303.2	3470.0
57.5°	2956.7	2936.8	2989.2	3065.1	3295.3	3356.7	3752.6	3628.3	3211.9	3485.5	3481.0
60°	3191.9	3194.9	3203.9	3299.7	3598.3	3677.2	4120.1	3897.9	3309.7	3597.3	3359.2
62.5°	3474.5	3479.0	3497.5	3644.7	4005.2	4079.6	4511.5	4118.6	3354.7	3565.9	3044.6
65°	3455.0	3474.0	3680.2	4184.0	4623.8	4697.2	4968.3	4273.3	3286.8	3278.3	2478.9
67.5°	3147.5	3178.4	3523.4	4828.0	5556.5	5638.4	5520.5	4303.8	2993.7	2549.3	1617.2
70°	2744.0	2755.0	3169.9	5407.2	6636.4	6719.3	6014.8	3968.8	2271.7	1422.0	724.5
72.5°	2142.9	2145.4	2632.2	5541.5	7222.6	7227.1	5626.9	2946.3	1221.7	546.2	251.6
75°	1530.8	1515.8	1763.0	4494.0	6354.3	6405.3	4218.4	1382.0	466.8	258.1	125.3
77.5°	820.8	837.3	997.6	2665.2	4389.7	4476.6	2301.7	398.4	237.7	175.7	82.9
80°	253.6	267.6	408.9	1220.2	2486.4	2538.8	853.3	177.2	165.8	125.3	54.4
82.5°	79.9	82.9	190.7	512.8	1032.0	1056.0	247.1	100.4	113.3	82.9	32.0
85°	23.0	23.5	84.9	191.2	255.1	260.1	69.4	38.9	64.9	51.4	16.5
87.5°	2.5	8.0	32.0	32.0	22.5	22.0	7.5	8.5	18.5	6.5	3.0
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: P882230
 CATALOG NUMBER: NAV-SB2A-730-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	989.6	990.1	983.6	972.6	960.6	950.6	938.1	928.2	921.2	919.2	922.7
5°	996.6	993.1	974.6	941.1	901.2	866.8	828.3	797.9	777.9	769.4	772.4
7.5°	1007.0	997.1	956.6	890.7	814.3	746.4	677.5	624.1	590.1	573.2	575.7
10°	1016.0	996.1	926.7	817.8	701.0	598.1	505.3	440.9	404.9	387.9	388.4
12.5°	1024.5	995.6	887.7	731.4	573.2	447.4	361.0	329.0	319.0	315.5	314.5
15°	1040.5	997.1	838.8	632.6	445.9	338.0	306.6	306.1	308.1	307.1	306.6
17.5°	1062.5	998.6	783.4	527.7	344.0	298.1	296.6	301.1	304.1	302.6	302.1
20°	1090.9	1004.6	724.5	423.9	295.6	288.1	291.6	295.6	298.1	295.6	295.1
22.5°	1130.9	1015.0	660.0	340.5	280.1	282.1	285.1	289.6	292.1	288.6	288.1
25°	1179.8	1031.5	596.6	296.1	272.6	275.1	279.6	284.6	287.6	284.1	283.6
27.5°	1243.2	1058.0	538.2	286.1	265.1	266.6	273.1	280.6	284.6	280.1	280.1
30°	1335.1	1101.4	487.8	290.6	260.6	257.1	266.1	276.6	281.1	277.1	276.6
32.5°	1456.9	1162.8	456.8	297.6	258.6	246.1	254.6	268.1	275.6	273.1	273.1
35°	1616.7	1256.2	444.9	305.6	257.1	234.7	240.7	255.1	268.1	270.6	270.6
37.5°	1810.4	1386.0	448.4	309.1	252.6	225.2	228.2	240.7	257.6	265.6	267.6
40°	2030.6	1537.3	468.3	305.6	247.6	217.2	217.7	227.2	242.2	254.1	258.1
42.5°	2257.7	1714.0	505.3	292.6	243.1	210.2	208.7	215.2	225.2	233.7	237.2
45°	2473.9	1895.8	541.7	274.6	237.7	203.2	199.7	202.2	204.2	207.7	209.7
47.5°	2662.7	2023.6	531.2	258.1	230.2	195.2	189.2	188.2	182.2	181.7	181.2
50°	2793.0	2051.5	471.8	241.7	219.2	186.2	176.7	170.8	160.3	155.3	155.8
52.5°	2834.4	1941.2	385.4	225.2	201.2	174.2	160.8	151.3	138.3	133.8	133.3
55°	2779.5	1725.0	308.1	205.2	176.2	158.3	143.3	130.8	120.3	114.8	114.8
57.5°	2645.2	1449.9	243.6	181.7	149.8	140.3	125.3	112.8	103.9	98.4	97.4
60°	2422.5	1151.3	192.7	153.8	127.8	120.8	105.3	97.4	89.4	82.9	81.4
62.5°	2084.5	821.8	151.3	121.8	106.8	98.9	89.9	83.9	74.4	65.4	63.9
65°	1626.7	502.8	116.8	89.4	85.9	81.9	76.4	70.9	59.4	50.4	48.9
67.5°	1026.0	238.2	83.4	67.4	67.9	65.9	63.4	58.9	50.4	42.4	41.4
70°	451.8	115.3	54.9	51.4	50.4	50.4	52.4	50.9	42.9	35.4	34.0
72.5°	153.8	61.9	40.9	38.9	36.4	35.9	43.9	42.4	34.5	27.5	26.0
75°	80.4	41.4	30.0	28.0	22.0	26.5	34.9	33.0	24.5	18.0	16.5
77.5°	52.4	29.5	20.5	18.0	12.5	17.5	26.0	23.0	14.5	9.0	8.0
80°	33.0	19.5	12.0	8.5	6.0	9.5	14.0	10.0	5.5	2.0	1.5
82.5°	17.5	10.0	4.5	3.0	2.5	3.0	3.5	2.5	1.0	0.0	0.0
85°	7.0	3.5	1.5	1.0	0.5	0.0	1.0	0.5	0.0	0.0	0.0
87.5°	2.5	0.5	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)