

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: P883586

Luminaire Tested: **NAV-SB4A-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13068 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

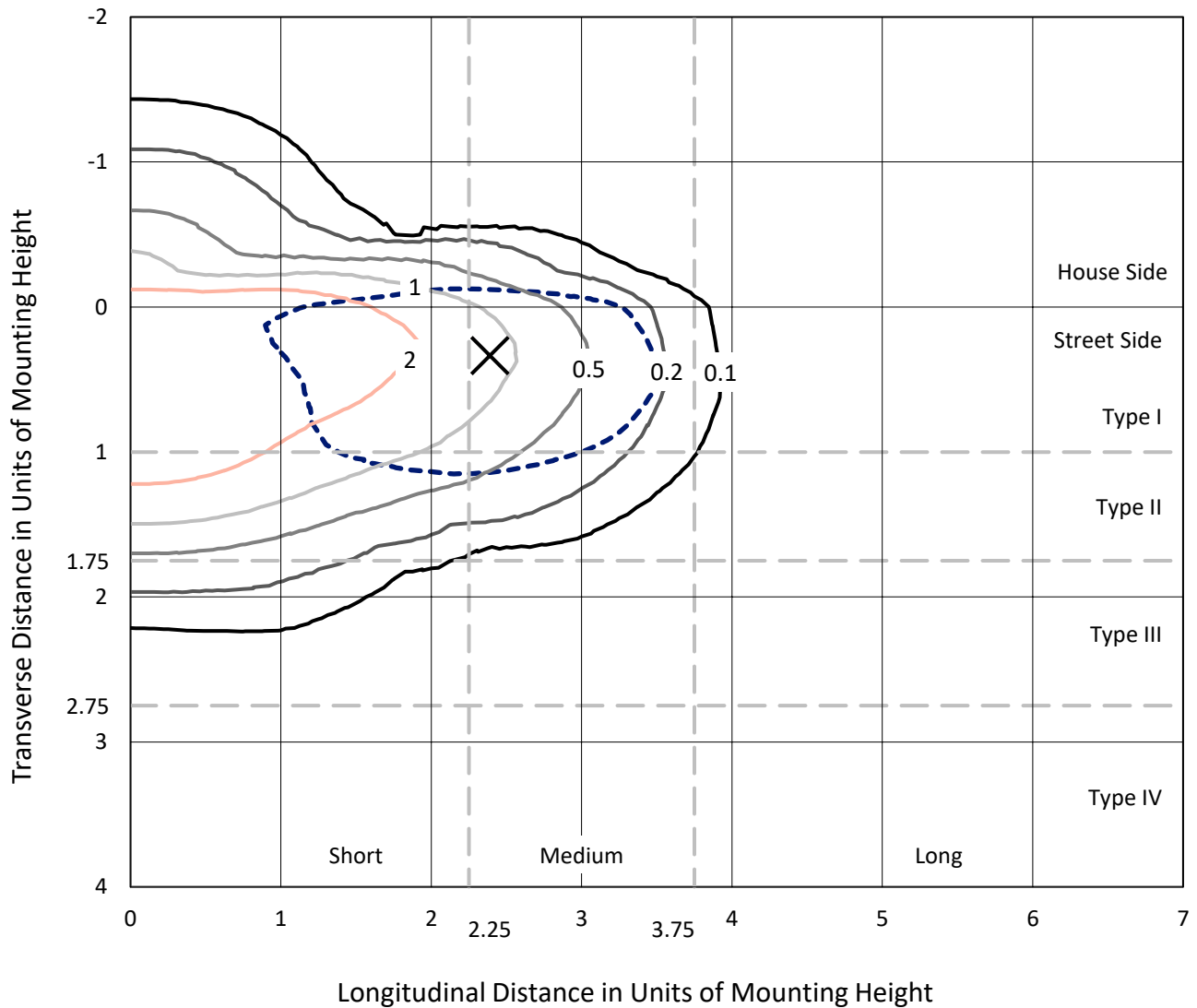
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883586
 CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

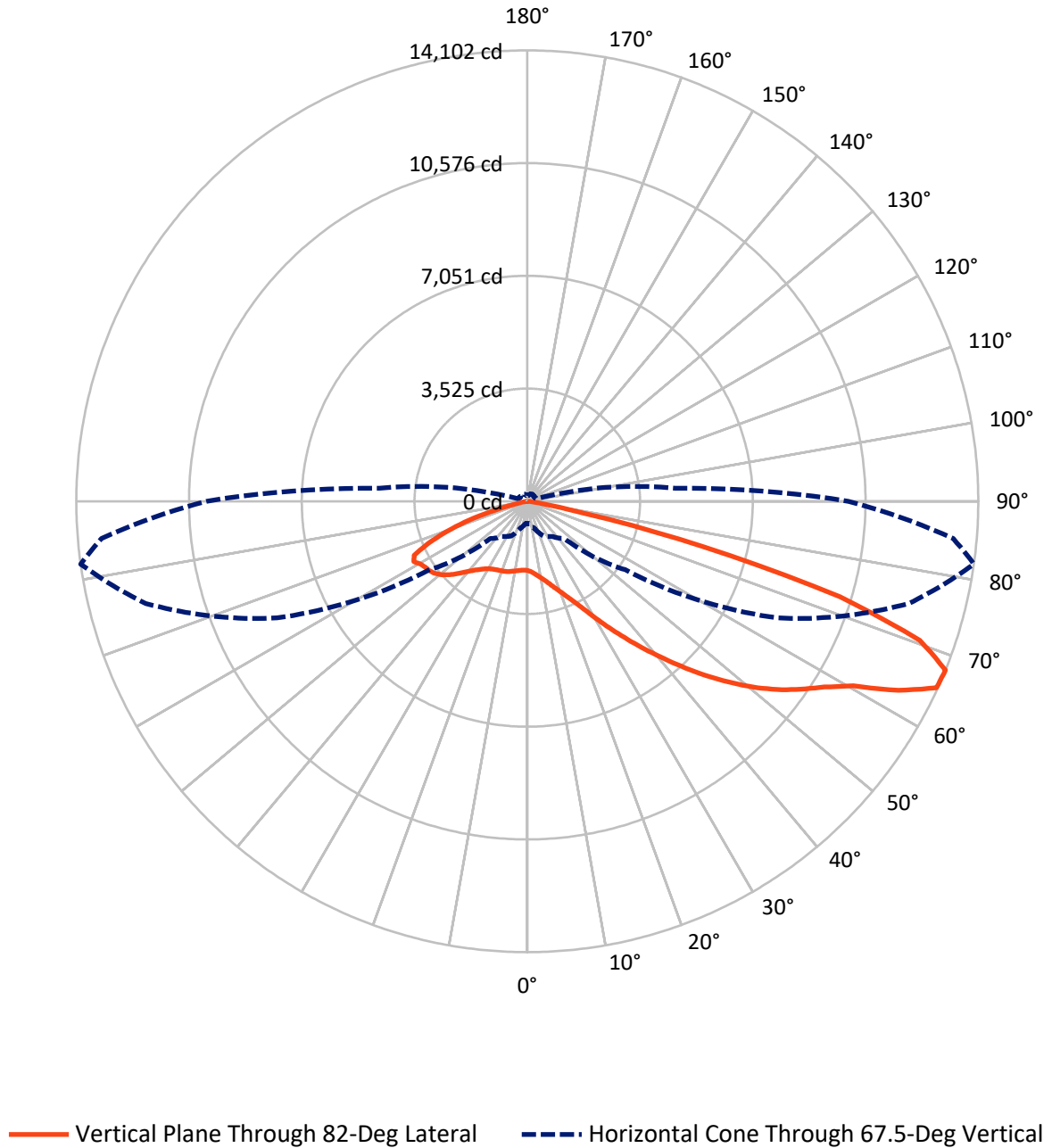
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P883586
CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P883586

CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2367.1	0.0	2367.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10700.8	0.0	10700.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	13068.0	0.0	13068.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.9	1.5
10°-20°	501.2	3.8
20°-30°	802.8	6.1
30°-40°	1419.6	10.9
40°-50°	2487.2	19.0
50°-60°	3317.3	25.4
60°-70°	3088.2	23.6
70°-80°	1185.2	9.1
80°-90°	73.6	0.6
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°	13068.0	100.0
0°-180°	13068.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883586

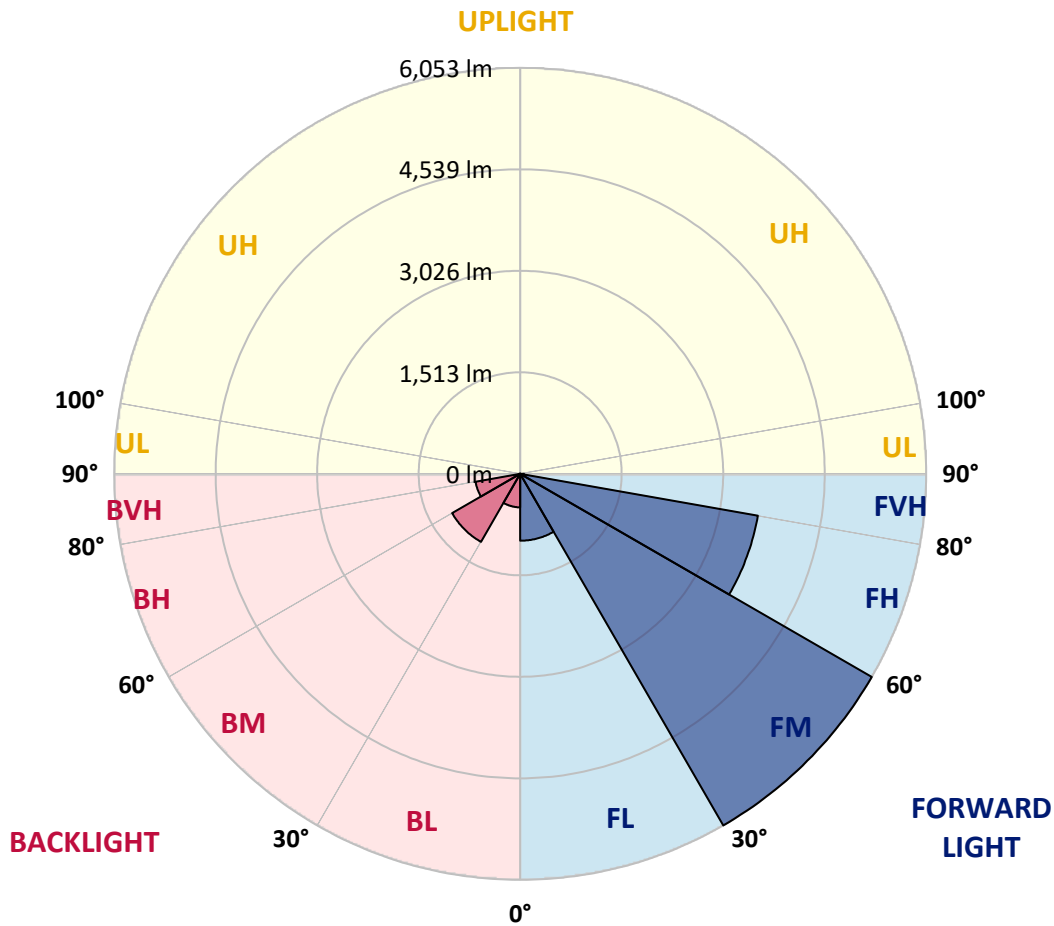
CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	996.9	7.6			
FM (30°-60°)	6052.6	46.3			
FH (60°-80°)	3597.8	27.5			G2/5000
FVH (80°-90°)	53.5	0.4			G1/100
BL (0°-30°)	499.9	3.8	B1/500		
BM (30°-60°)	1171.5	9.0	B2/2500		
BH (60°-80°)	675.6	5.2	B2/1000		G2/1000
BVH (80°-90°)	20.1	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



REPORT NUMBER: P883586
 CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9
2.5°	2288.2	2301.4	2293.8	2290.1	2283.5	2274.1	2266.5	2243.0	2218.6	2202.6	2196.9
5°	2334.3	2347.5	2346.5	2350.3	2355.0	2357.8	2355.9	2329.6	2294.8	2267.5	2251.5
7.5°	2294.8	2309.8	2322.0	2340.9	2373.8	2408.6	2425.5	2419.9	2384.1	2346.5	2326.8
10°	2182.8	2198.8	2228.0	2272.2	2341.8	2417.1	2480.1	2509.3	2486.7	2445.3	2418.0
12.5°	1977.7	1993.7	2051.1	2147.0	2263.7	2394.5	2514.9	2593.0	2598.7	2557.3	2525.3
15°	1747.2	1763.2	1824.3	1944.8	2122.6	2332.4	2533.7	2681.5	2731.3	2695.6	2657.0
17.5°	1604.2	1618.3	1664.4	1761.3	1946.6	2208.2	2527.2	2775.5	2889.4	2861.2	2815.1
20°	1560.9	1573.1	1594.8	1662.5	1816.8	2079.3	2483.9	2864.0	3059.7	3043.7	2991.9
22.5°	1607.0	1618.3	1624.9	1655.0	1751.9	1994.6	2429.3	2954.3	3257.3	3259.1	3196.1
25°	1713.3	1724.6	1717.1	1735.9	1778.2	1968.3	2408.6	3060.6	3505.7	3526.4	3454.8
27.5°	1888.3	1889.3	1871.4	1870.4	1877.0	2007.8	2430.2	3174.5	3819.0	3857.5	3769.1
30°	2239.3	2225.1	2156.5	2082.1	2048.3	2126.3	2490.5	3309.0	4188.7	4257.4	4146.4
32.5°	2780.2	2759.6	2633.5	2455.7	2276.9	2317.3	2598.7	3462.4	4591.4	4715.6	4580.1
35°	3367.3	3361.7	3230.0	2965.6	2653.2	2589.3	2774.6	3663.7	5030.8	5228.4	5067.5
37.5°	3913.0	3910.2	3835.0	3523.5	3143.4	2968.4	3056.9	3927.2	5501.2	5787.2	5597.2
40°	4411.7	4420.2	4344.9	4066.4	3683.5	3454.8	3440.7	4252.7	6024.3	6396.0	6170.2
42.5°	4842.6	4852.0	4775.8	4569.8	4216.9	3993.0	3912.1	4651.6	6535.2	7049.9	6782.7
45°	5135.2	5193.6	5182.3	5017.6	4764.5	4532.1	4478.5	5152.2	7117.6	7743.3	7430.0
47.5°	5218.0	5271.7	5356.3	5378.9	5224.6	4996.0	5060.0	5755.3	7706.6	8437.7	8081.1
50°	5013.9	5063.7	5239.7	5473.9	5581.2	5510.6	5625.4	6401.6	8309.7	9130.1	8719.9
52.5°	4611.2	4662.0	4884.0	5254.7	5692.2	5914.3	6192.8	7038.6	8894.0	9785.9	9324.9
55°	4028.8	4082.4	4367.5	4787.1	5480.5	6080.8	6666.0	7674.6	9429.3	10375.8	9870.6
57.5°	3236.6	3276.1	3572.5	4159.6	4948.0	5915.2	7015.1	8369.0	9933.6	10955.4	10411.6
60°	2109.4	2144.2	2488.6	3143.4	4065.5	5362.0	7084.7	9143.3	10603.5	11709.0	11140.8
62.5°	1402.8	1426.3	1630.5	2111.3	2863.0	4299.7	6677.3	9761.5	11585.8	13020.6	12391.2
65°	962.5	986.0	1190.2	1525.1	1849.7	2844.2	5505.9	9679.6	12475.8	14062.1	13317.9
67.5°	686.8	706.6	879.7	1195.8	1338.8	1652.2	3732.4	8633.4	12347.9	14101.7	13367.8
70°	492.1	503.4	646.4	931.5	1064.1	992.6	2075.5	6603.0	10811.5	13021.5	12349.8
72.5°	344.4	348.1	448.8	709.4	857.1	724.5	987.9	4402.3	8177.0	10220.6	9574.2
75°	233.3	238.0	302.0	520.3	687.8	553.2	523.1	2360.6	4800.3	5657.4	5071.3
77.5°	143.0	144.9	194.8	355.6	514.7	421.5	336.8	1000.1	1857.3	1823.4	1554.3
80°	80.9	80.9	124.2	221.1	350.9	271.9	236.2	425.3	588.0	516.5	455.4
82.5°	45.2	46.1	90.3	137.4	232.4	160.9	129.8	196.6	254.0	224.9	195.7
85°	18.8	20.7	55.5	64.9	111.0	80.0	52.7	82.8	94.1	83.7	61.2
87.5°	1.9	2.8	16.9	12.2	13.2	16.0	7.5	16.0	13.2	13.2	9.4
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: P883586

CATALOG NUMBER: NAV-SB4A-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9	2164.9
2.5°	2179.0	2164.9	2129.2	2087.8	2033.2	2006.9	1971.1	1946.6	1925.9	1927.8	1909.0
5°	2221.4	2185.6	2105.7	2005.9	1881.7	1793.3	1699.2	1634.3	1581.6	1570.3	1544.9
7.5°	2279.7	2223.3	2083.1	1903.4	1693.6	1534.5	1392.5	1301.2	1236.3	1215.6	1194.9
10°	2355.0	2273.1	2053.9	1774.5	1472.5	1270.2	1117.7	1046.2	1002.0	987.0	975.7
12.5°	2442.5	2330.5	2015.3	1617.3	1244.8	1050.0	953.1	917.3	903.2	898.5	895.7
15°	2552.6	2402.0	1957.0	1431.1	1051.9	915.5	874.1	869.4	871.2	869.4	868.4
17.5°	2683.3	2480.1	1862.0	1239.1	922.0	846.8	831.7	835.5	840.2	839.2	837.4
20°	2826.4	2557.3	1740.6	1068.8	833.6	797.9	789.4	793.1	796.9	795.0	794.1
22.5°	2989.1	2640.1	1606.1	936.2	774.3	752.7	743.3	744.2	744.2	740.5	738.6
25°	3183.9	2731.3	1464.9	842.1	729.2	712.2	700.9	697.2	691.5	680.2	678.4
27.5°	3416.3	2828.2	1329.4	776.2	693.4	677.4	664.2	654.8	640.7	621.9	620.0
30°	3677.8	2945.8	1214.7	734.8	665.2	649.2	634.1	620.0	599.3	575.8	573.9
32.5°	3985.5	3071.9	1130.9	707.5	639.8	622.9	605.0	588.0	565.5	541.9	542.9
35°	4352.4	3224.3	1082.0	688.7	620.0	597.4	577.7	558.9	541.9	521.2	519.4
37.5°	4750.4	3386.2	1066.9	679.3	606.9	572.0	549.5	536.3	534.4	522.2	521.2
40°	5186.0	3578.1	1078.2	673.7	592.7	547.6	523.1	520.3	525.0	503.4	504.3
42.5°	5647.1	3805.8	1097.0	667.1	573.0	523.1	499.6	499.6	495.8	465.7	465.7
45°	6145.7	4068.3	1115.9	651.1	549.5	498.7	480.8	474.2	458.2	429.0	428.1
47.5°	6648.1	4335.5	1130.0	621.9	521.2	478.0	462.0	446.9	423.4	397.0	396.1
50°	7125.2	4575.4	1114.9	578.6	489.2	458.2	441.3	420.6	395.2	377.3	374.5
52.5°	7551.4	4783.3	1050.9	527.8	455.4	437.5	422.4	400.8	380.1	361.3	359.4
55°	7922.1	4951.8	938.0	479.8	425.3	419.6	404.6	377.3	349.1	333.1	331.2
57.5°	8277.7	5079.7	796.9	440.3	398.0	399.9	377.3	352.8	326.5	309.5	307.7
60°	8751.0	5251.0	653.9	403.6	368.8	374.5	350.0	332.1	299.2	277.6	274.7
62.5°	9507.4	5517.2	519.4	358.5	334.9	336.8	326.5	304.8	265.3	239.9	238.0
65°	10107.7	5419.4	409.3	309.5	296.4	299.2	299.2	275.7	233.3	204.2	201.3
67.5°	10039.9	4640.3	326.5	261.6	259.7	261.6	268.1	248.4	207.0	183.5	179.7
70°	9248.7	3691.0	261.6	217.3	225.8	221.1	239.9	226.7	186.3	162.8	159.9
72.5°	7546.7	2658.9	199.5	179.7	173.1	180.6	216.4	204.2	155.2	128.9	126.1
75°	4409.8	1418.8	148.7	142.1	125.1	150.5	191.9	174.1	118.5	95.0	92.2
77.5°	1435.8	494.9	109.1	104.4	93.1	121.4	163.7	146.8	96.9	75.3	72.4
80°	384.8	149.6	74.3	68.7	60.2	90.3	129.8	116.7	69.6	48.9	48.0
82.5°	154.3	63.0	43.3	38.6	32.9	62.1	102.6	94.1	51.7	31.0	31.0
85°	49.9	20.7	16.0	12.2	15.1	38.6	61.2	64.0	36.7	16.0	12.2
87.5°	6.6	2.8	2.8	3.8	2.8	6.6	18.8	17.9	10.3	1.9	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)