

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: P962062

Luminaire Tested: **NAV-SB2B-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962062
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7872 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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: 24 FT

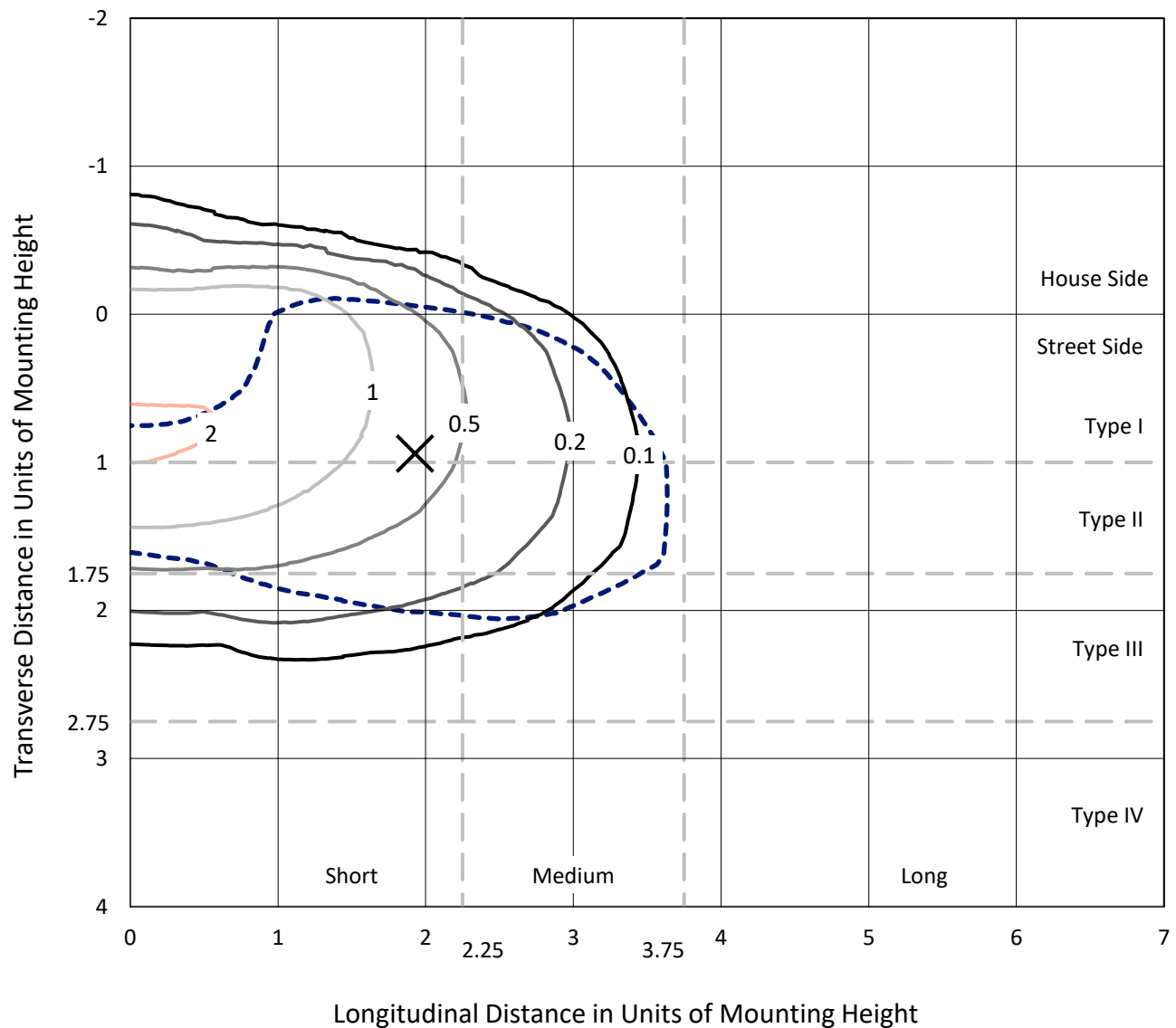


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Iso-Footcandle Lines of Horizontal Illumination

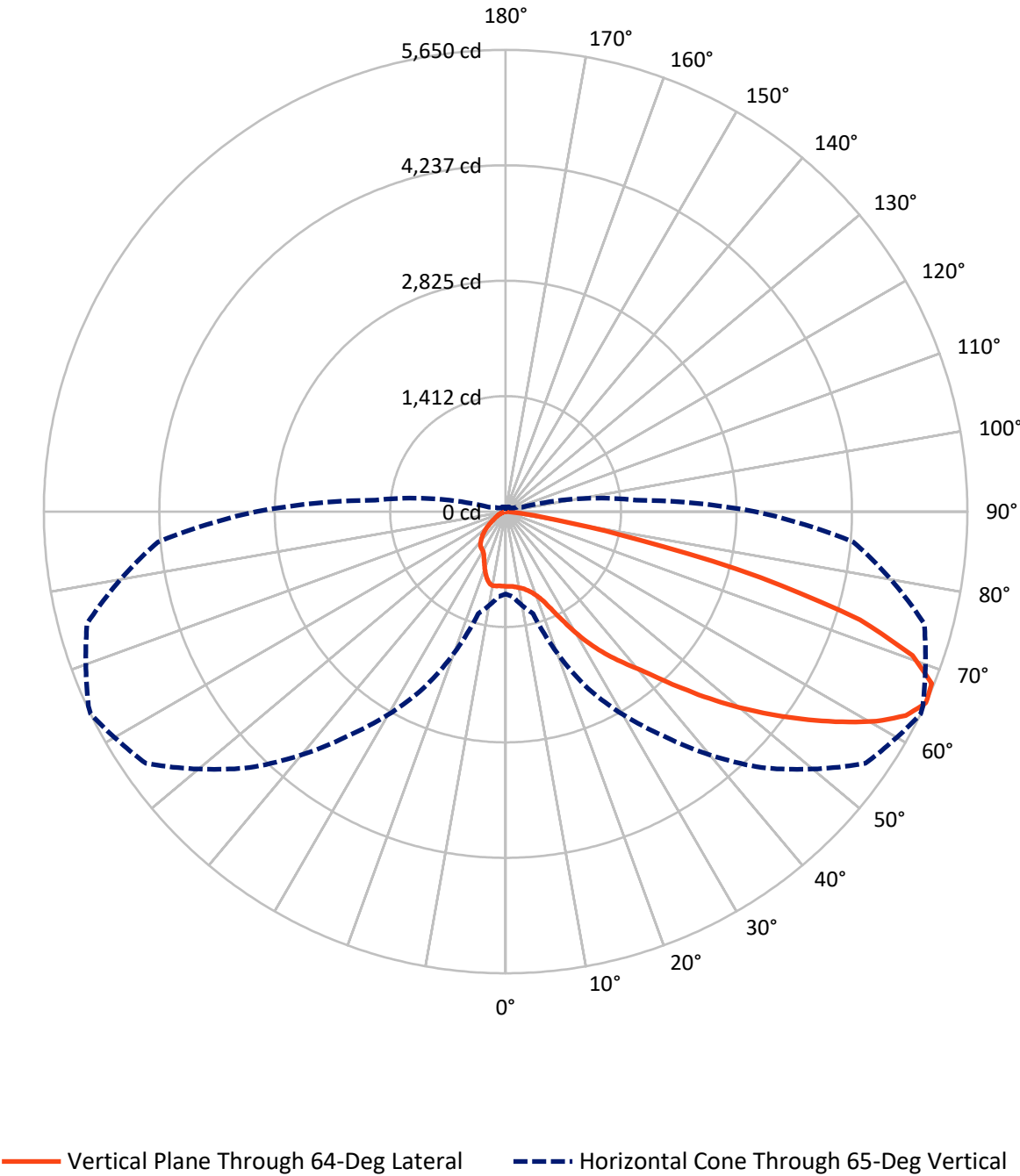
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1052.7	0.0	1052.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6819.3	0.0	6819.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	7872.0	0.0	7872.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	1.1
10°-20°	229.1	2.9
20°-30°	434.1	5.5
30°-40°	878.5	11.2
40°-50°	1496.6	19.0
50°-60°	2035.2	25.9
60°-70°	1911.2	24.3
70°-80°	765.7	9.7
80°-90°	37.1	0.5
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°	7872.0	100.0
0°-180°	7872.0	100.0

Coefficient of Utilization



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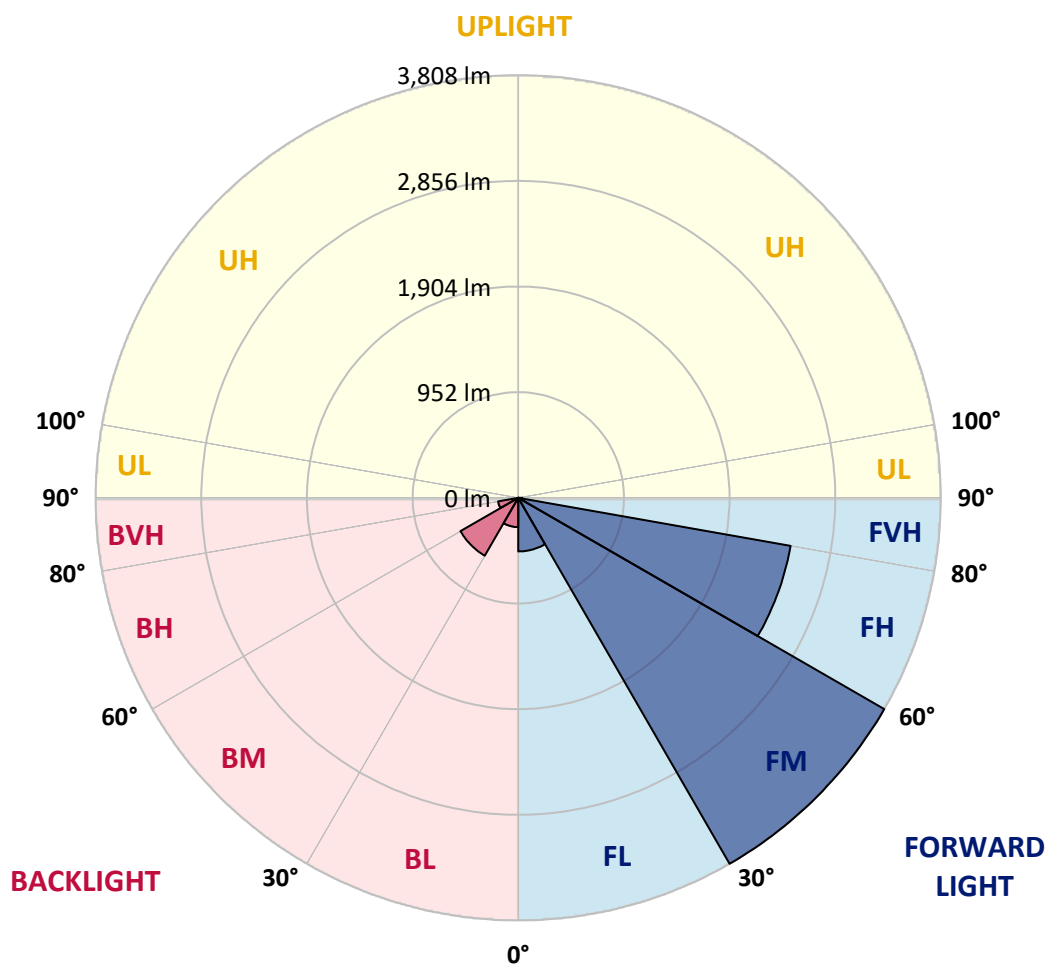
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	483.4	6.1			
FM	(30°-60°)	3808.5	48.4			
FH	(60°-80°)	2492.1	31.7			G2/5000
FVH	(80°-90°)	35.3	0.4			G1/100
BL	(0°-30°)	264.3	3.4	B1/500		
BM	(30°-60°)	601.8	7.6	B1/1000		
BH	(60°-80°)	184.8	2.3	B1/500		G1/500
BVH	(80°-90°)	1.8	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6
2.5°	912.5	918.8	917.2	915.6	915.0	916.1	916.7	916.1	916.1	916.1	916.7
5°	895.0	900.3	900.3	903.9	909.3	915.6	920.3	921.4	922.5	924.0	923.5
7.5°	861.7	866.0	869.2	881.3	894.5	911.3	925.6	933.1	934.1	939.8	942.0
10°	839.1	844.4	849.6	862.3	881.3	906.6	930.9	948.8	951.5	965.2	971.5
12.5°	838.0	843.3	850.1	863.9	886.0	913.0	942.5	968.3	973.1	993.1	1006.3
15°	849.1	855.5	861.7	878.6	902.4	935.1	966.8	999.0	1003.7	1032.2	1046.4
17.5°	871.8	880.3	885.0	901.9	927.2	963.6	1005.3	1042.2	1046.4	1079.7	1097.7
20°	916.7	926.7	928.2	942.0	966.8	1005.8	1055.4	1101.4	1106.6	1144.6	1164.7
22.5°	1009.5	1023.8	1011.2	1017.9	1040.2	1079.2	1133.0	1191.0	1198.4	1241.7	1259.6
25°	1173.1	1193.2	1160.5	1148.8	1158.4	1198.9	1266.5	1339.9	1348.3	1383.1	1392.2
27.5°	1494.6	1468.6	1419.0	1370.5	1342.0	1365.2	1441.3	1532.0	1542.5	1576.3	1565.8
30°	1847.6	1824.8	1757.9	1650.1	1582.6	1578.9	1649.1	1750.5	1762.6	1794.8	1762.6
32.5°	2201.1	2179.5	2106.7	1974.3	1857.1	1799.0	1847.6	1960.0	1966.3	1986.9	1939.4
35°	2548.9	2526.7	2453.8	2318.2	2174.2	2042.3	2032.8	2159.5	2161.5	2183.1	2112.4
37.5°	2898.8	2880.2	2802.8	2669.7	2527.8	2345.7	2257.6	2348.4	2351.0	2372.1	2298.8
40°	3148.4	3156.3	3103.0	3000.1	2878.2	2679.2	2509.8	2549.4	2533.6	2569.0	2525.2
42.5°	3362.6	3378.5	3332.1	3280.3	3209.6	3034.4	2822.2	2815.4	2790.0	2809.0	2763.7
45°	3547.8	3561.1	3519.3	3507.2	3505.6	3382.7	3163.7	3122.6	3087.2	3083.5	3029.1
47.5°	3615.9	3641.3	3659.2	3699.8	3779.0	3727.3	3516.8	3452.9	3413.2	3384.2	3298.2
50°	3641.8	3668.7	3730.0	3848.2	4035.5	4057.7	3868.1	3796.4	3747.9	3695.1	3568.4
52.5°	3607.0	3654.9	3737.4	3936.3	4208.0	4322.5	4205.4	4142.6	4087.2	4001.2	3813.3
55°	3401.7	3449.7	3618.0	3935.2	4294.0	4508.4	4524.1	4496.2	4433.9	4298.2	4011.2
57.5°	2968.9	3040.1	3306.6	3801.2	4292.5	4668.3	4836.6	4856.7	4787.0	4592.7	4166.9
60°	2369.5	2466.0	2791.1	3504.1	4160.1	4754.8	5110.4	5210.7	5136.8	4883.0	4293.0
62.5°	1653.3	1765.3	2072.9	3038.6	3857.1	4692.4	5310.4	5495.6	5439.8	5142.6	4341.6
65°	1008.5	1044.4	1292.4	2391.1	3342.0	4431.8	5372.2	5649.8	5631.3	5301.5	4269.7
67.5°	671.8	701.8	773.2	1639.6	2594.3	3910.9	5224.4	5622.8	5628.2	5275.6	4007.0
70°	404.8	430.6	477.0	953.6	1681.3	3095.6	4766.9	5279.9	5310.4	4929.9	3508.8
72.5°	166.8	184.2	226.4	432.2	870.7	1964.7	3795.9	4533.2	4604.4	4145.2	2693.0
75°	94.5	103.4	132.9	216.9	377.8	915.6	2299.3	3218.1	3323.0	2857.1	1620.1
77.5°	62.8	67.0	86.0	140.3	212.7	312.4	982.6	1676.6	1877.1	1560.5	701.3
80°	42.2	45.9	59.1	93.9	138.3	134.1	312.9	621.2	764.1	536.2	171.0
82.5°	28.5	29.0	42.2	61.7	87.6	64.9	92.4	193.1	242.7	155.2	64.9
85°	16.4	15.8	31.2	35.9	39.1	27.0	28.0	58.0	76.0	65.4	36.9
87.5°	2.2	3.2	12.1	9.5	5.2	5.8	5.8	10.0	14.8	15.8	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6	915.6
2.5°	916.7	916.1	914.5	913.0	909.3	907.1	908.3	907.1	906.6	907.1	909.3
5°	923.5	921.9	917.7	912.5	905.1	896.1	890.3	881.8	873.9	869.2	870.2
7.5°	942.0	940.4	934.6	919.8	896.1	858.6	824.3	794.2	771.5	758.3	758.9
10°	971.5	968.9	959.9	927.2	864.9	783.1	715.0	658.6	621.7	604.2	602.7
12.5°	1006.3	1003.2	987.4	920.3	805.9	678.1	584.1	521.4	487.1	471.8	470.2
15°	1047.6	1043.3	1012.2	887.6	719.9	562.0	476.0	429.1	406.8	393.2	393.7
17.5°	1098.7	1091.3	1030.6	838.6	626.4	473.3	409.5	374.1	354.6	341.4	340.4
20°	1165.2	1153.0	1045.4	779.9	540.4	417.4	364.7	335.1	320.3	308.7	306.6
22.5°	1258.1	1240.7	1063.3	716.7	479.7	378.9	331.4	309.8	297.7	284.4	282.3
25°	1373.1	1352.6	1085.5	658.0	438.0	345.6	307.1	289.2	274.9	259.6	258.1
27.5°	1534.1	1497.1	1111.9	610.1	402.1	317.1	285.0	265.0	248.6	235.9	233.3
30°	1713.5	1652.8	1135.1	581.0	369.4	290.8	255.9	235.9	220.6	211.7	210.0
32.5°	1883.4	1801.1	1150.5	568.4	339.9	260.7	224.3	202.6	191.1	188.4	189.9
35°	2043.8	1935.2	1148.8	556.3	313.4	230.6	193.1	171.0	162.1	163.6	163.6
37.5°	2228.6	2078.2	1137.8	537.2	291.8	203.2	166.3	146.7	138.8	139.3	141.4
40°	2443.4	2243.3	1130.9	501.3	268.0	177.8	144.1	128.2	122.4	120.3	119.8
42.5°	2672.4	2403.2	1132.0	460.7	238.5	155.2	128.7	115.6	110.3	108.8	108.1
45°	2902.5	2555.7	1133.5	418.5	207.4	137.8	117.7	106.6	103.4	101.4	101.4
47.5°	3118.9	2685.6	1104.0	373.1	176.8	124.5	108.8	101.4	98.7	96.0	96.0
50°	3320.4	2772.1	1032.8	320.3	152.5	114.0	101.9	96.6	93.9	91.3	91.3
52.5°	3477.1	2785.8	915.0	266.0	135.6	106.1	97.6	92.9	89.7	87.1	86.5
55°	3546.8	2699.8	747.7	215.4	122.4	99.2	93.4	88.7	85.0	82.3	81.8
57.5°	3528.9	2518.8	583.1	173.1	109.8	92.4	88.1	85.0	80.8	76.6	76.0
60°	3440.7	2276.6	439.6	144.1	98.2	85.0	82.3	79.6	73.9	67.5	66.5
62.5°	3288.2	1972.1	313.4	119.3	85.5	76.6	75.4	73.4	64.9	53.3	52.3
65°	3055.0	1602.2	211.0	99.2	73.4	67.0	67.5	63.9	52.8	39.6	38.5
67.5°	2714.1	1171.6	135.1	81.3	61.2	56.0	56.5	54.3	44.9	33.8	32.2
70°	2279.7	775.7	88.1	61.7	49.1	43.3	46.4	46.9	38.0	27.5	26.3
72.5°	1671.3	458.1	61.7	45.9	35.9	30.0	38.0	39.1	30.6	20.6	19.5
75°	952.5	217.4	46.4	33.2	22.1	21.1	29.5	29.5	21.1	13.7	12.7
77.5°	400.1	90.8	32.7	21.6	12.7	12.1	20.1	18.4	10.6	6.4	6.4
80°	115.6	40.6	17.4	10.6	5.2	4.7	7.9	5.8	2.7	1.0	1.0
82.5°	45.4	17.9	6.9	4.2	2.2	2.2	1.0	0.0	0.0	0.0	0.0
85°	27.0	7.4	3.2	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	1.5	1.0	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)