

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: McGRAW-EDISON

Report Number: P299480

Luminaire Tested: **GLNA-AF-05-LED-E1-5NQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299480
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-05-LED-E1-5NQ-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19487.5 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

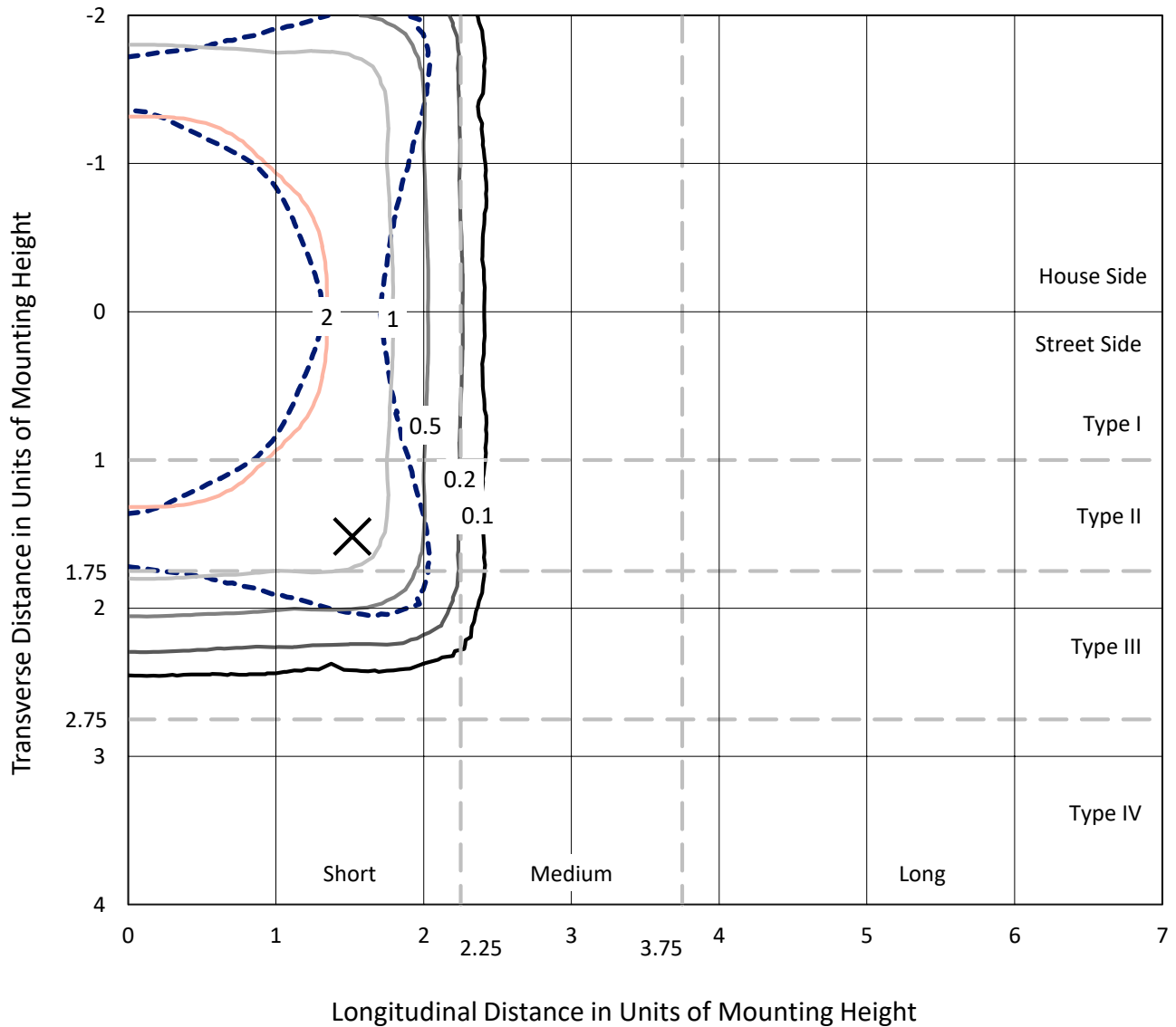
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

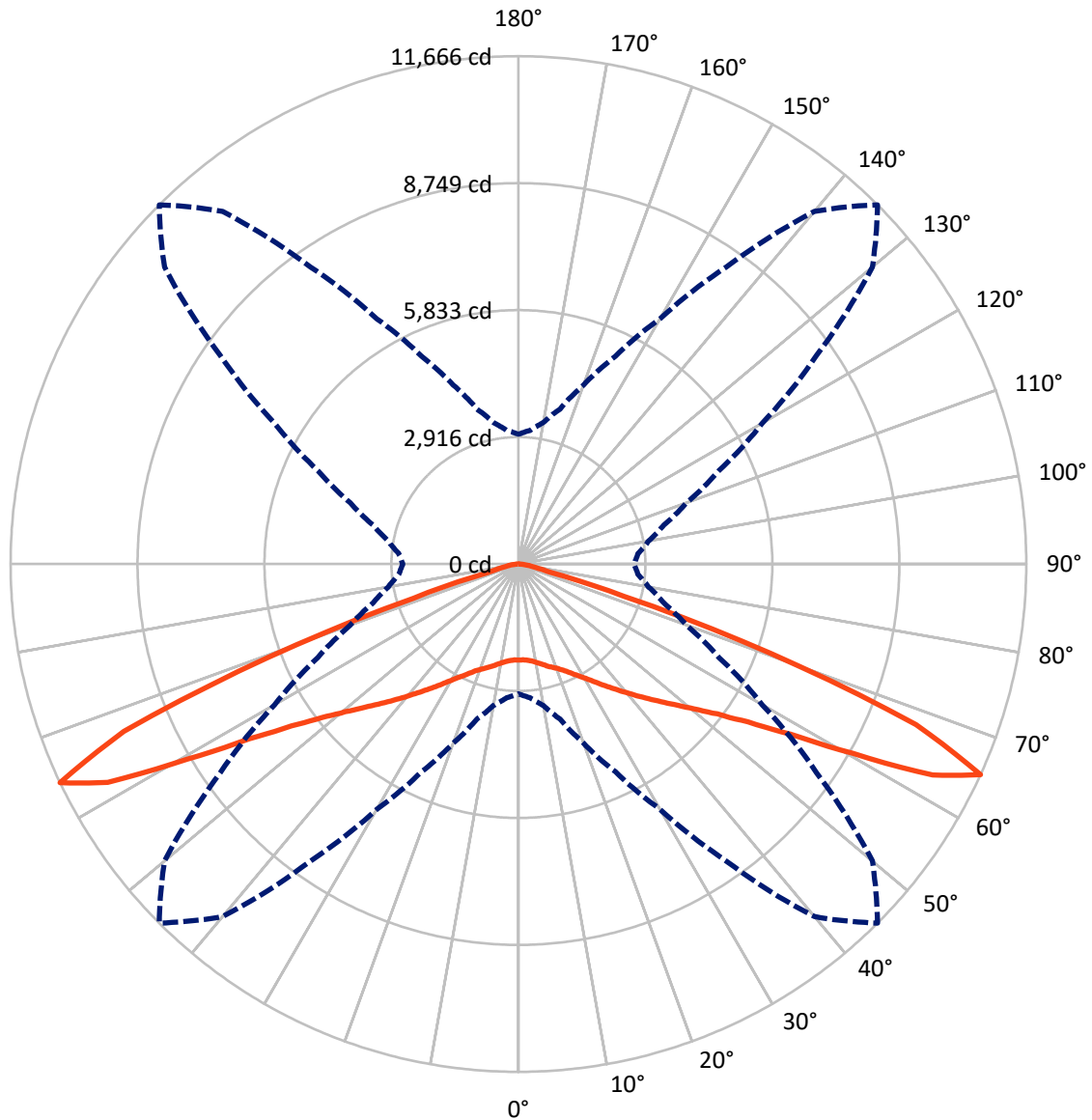
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9743.8	0.0	9743.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9743.8	0.0	9743.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	19487.5	0.0	19487.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	1.1
10°-20°	689.3	3.5
20°-30°	1288.8	6.6
30°-40°	2179.8	11.2
40°-50°	3564.2	18.3
50°-60°	5667.6	29.1
60°-70°	5123.1	26.3
70°-80°	648.3	3.3
80°-90°	111.5	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°	19487.5	100.0
0°-180°	19487.5	100.0



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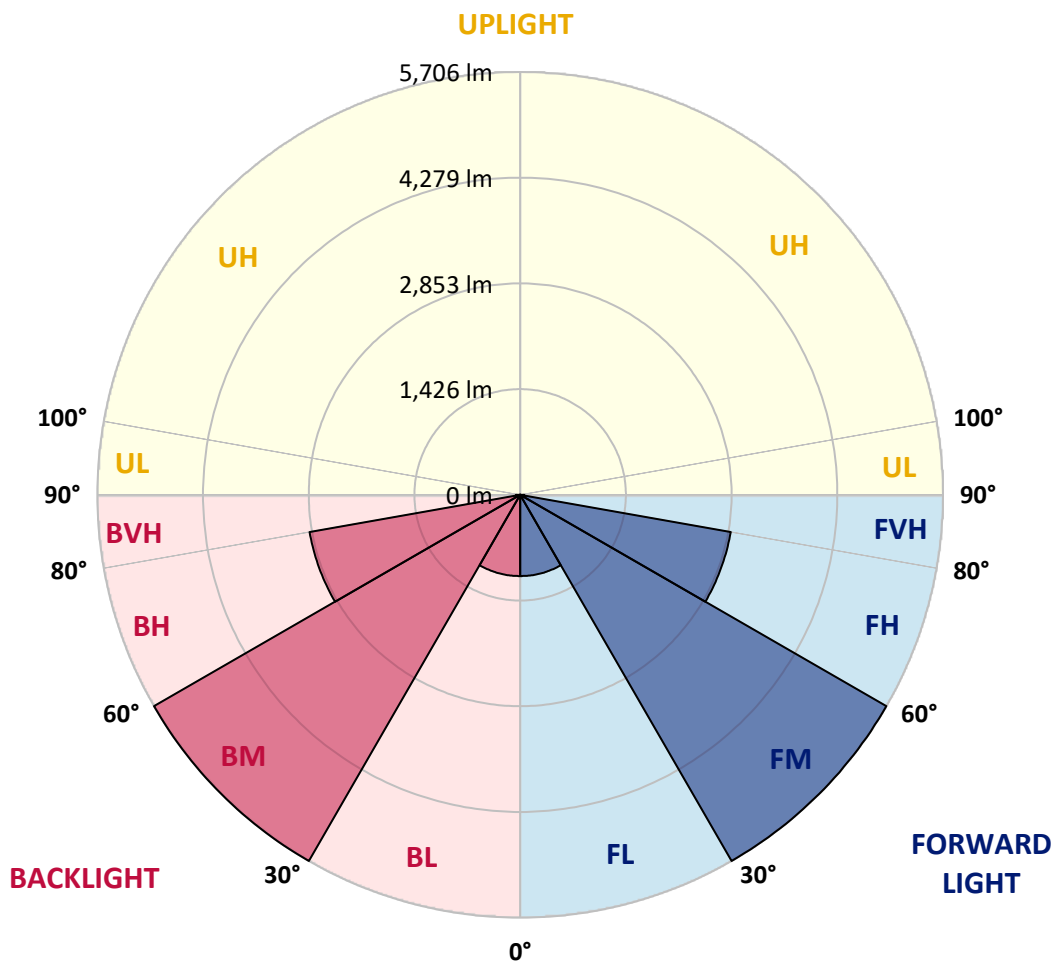
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1096.5	5.6			
FM	(30°-60°)	5705.7	29.3			
FH	(60°-80°)	2885.7	14.8			G2/5000
FVH	(80°-90°)	55.8	0.3			G1/100
BL	(0°-30°)	1096.5	5.6	B3/2500		
BM	(30°-60°)	5705.7	29.3	B4/8500		
BH	(60°-80°)	2885.7	14.8	B4/5000		G2/5000
BVH	(80°-90°)	55.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0
2.5°	2206.8	2208.7	2210.5	2208.7	2210.5	2207.8	2205.9	2208.7	2205.9	2203.2	2205.0
5°	2226.0	2226.9	2226.9	2224.2	2226.9	2225.1	2222.4	2226.0	2223.3	2220.5	2222.4
7.5°	2258.0	2261.6	2258.9	2256.1	2258.0	2256.1	2254.3	2255.2	2254.3	2251.6	2252.5
10°	2300.9	2303.6	2301.8	2300.9	2302.7	2301.8	2299.9	2299.0	2299.9	2297.2	2297.2
12.5°	2352.9	2352.0	2351.1	2352.0	2354.7	2354.7	2353.8	2354.7	2356.5	2357.4	2355.6
15°	2404.0	2405.8	2405.8	2405.8	2411.3	2415.9	2418.6	2420.4	2424.1	2425.0	2421.3
17.5°	2467.9	2467.9	2467.0	2467.9	2473.4	2480.7	2483.4	2487.0	2490.7	2493.4	2488.9
20°	2539.1	2540.9	2540.9	2542.7	2550.0	2558.2	2558.2	2560.1	2558.2	2560.1	2557.3
22.5°	2625.8	2631.2	2631.2	2632.2	2639.5	2649.5	2646.8	2649.5	2644.9	2648.6	2644.9
25°	2738.9	2747.2	2745.3	2745.3	2750.8	2757.2	2758.1	2763.6	2762.7	2767.2	2764.5
27.5°	2866.7	2879.5	2883.1	2882.2	2885.9	2892.3	2894.1	2900.5	2896.8	2900.5	2898.7
30°	3020.0	3025.5	3032.8	3035.6	3040.1	3046.5	3046.5	3047.4	3042.9	3048.3	3051.1
32.5°	3178.8	3188.9	3196.2	3212.6	3220.8	3225.4	3224.5	3226.3	3221.7	3229.0	3234.5
35°	3388.8	3396.1	3407.9	3420.7	3431.7	3430.7	3428.0	3428.9	3428.9	3435.3	3440.8
37.5°	3641.6	3643.4	3658.9	3677.2	3682.6	3677.2	3660.7	3657.1	3648.9	3657.1	3666.2
40°	3909.0	3915.4	3946.4	3958.3	3961.0	3951.0	3927.2	3913.6	3895.3	3905.3	3918.1
42.5°	4189.2	4202.0	4230.3	4251.2	4260.4	4254.0	4221.1	4200.1	4176.4	4181.9	4194.7
45°	4499.5	4515.0	4555.2	4575.2	4592.6	4582.5	4550.6	4518.7	4481.2	4484.0	4504.1
47.5°	4846.3	4861.8	4913.8	4947.6	4956.7	4954.9	4919.3	4875.5	4824.4	4822.6	4839.9
50°	5235.1	5250.6	5315.4	5367.4	5393.9	5391.2	5349.2	5287.1	5225.1	5226.0	5247.9
52.5°	5614.8	5633.9	5701.5	5790.9	5842.9	5880.4	5854.8	5796.4	5720.6	5722.5	5742.6
55°	5970.7	6002.7	6080.2	6201.6	6298.4	6403.3	6433.4	6431.6	6386.0	6398.8	6418.8
57.5°	6143.2	6190.7	6310.2	6501.9	6699.0	6912.6	7093.3	7228.4	7285.9	7372.6	7352.5
60°	5816.5	5892.2	6068.4	6350.4	6740.1	7185.5	7662.8	8129.2	8527.1	8827.4	8654.9
62.5°	4762.3	4860.9	5074.5	5435.9	6025.5	6738.3	7651.9	8754.4	9955.5	10680.1	10162.6
65°	2979.9	3082.1	3299.3	3686.3	4376.3	5262.5	6501.9	8329.1	10573.3	11665.8	10612.6
67.5°	1161.8	1217.5	1335.2	1582.6	2101.0	2889.5	4133.5	6207.1	8891.3	9848.7	8726.1
70°	582.3	587.8	609.7	655.3	766.6	995.7	1515.0	2877.7	5099.1	6158.7	4915.7
72.5°	420.7	421.7	432.6	452.7	488.3	539.4	638.0	880.7	1658.3	2534.5	1554.3
75°	322.2	325.8	332.2	343.2	362.3	387.9	423.5	507.4	628.8	729.2	613.3
77.5°	248.2	255.5	260.1	270.2	282.0	299.4	309.4	341.3	397.0	418.0	411.6
80°	188.9	195.3	205.4	213.6	221.8	230.0	226.3	240.9	270.2	287.5	278.4
82.5°	120.5	127.8	157.0	164.3	167.9	173.4	167.0	167.9	180.7	191.7	180.7
85°	77.6	82.1	99.5	108.6	109.5	113.2	110.4	104.0	104.0	94.9	106.8
87.5°	35.6	36.5	44.7	52.9	54.8	49.3	48.4	46.5	37.4	35.6	38.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0	2205.0
2.5°	2204.1	2205.9	2206.8	2209.6	2210.5	2210.5	2211.4	2213.2
5°	2221.5	2224.2	2225.1	2228.8	2229.7	2228.8	2230.6	2231.5
7.5°	2252.5	2257.0	2258.9	2262.5	2259.8	2263.4	2264.3	2264.3
10°	2298.1	2302.7	2303.6	2307.2	2305.4	2307.2	2307.2	2305.4
12.5°	2358.4	2359.3	2356.5	2359.3	2355.6	2357.4	2354.7	2352.9
15°	2425.0	2422.2	2415.9	2415.9	2410.4	2411.3	2410.4	2409.5
17.5°	2489.8	2484.3	2479.7	2477.9	2473.4	2472.4	2469.7	2469.7
20°	2561.0	2558.2	2555.5	2551.8	2547.3	2542.7	2541.8	2543.6
22.5°	2646.8	2645.8	2645.8	2644.0	2637.6	2633.1	2630.3	2630.3
25°	2761.8	2753.5	2753.5	2752.6	2749.9	2747.2	2741.7	2744.4
27.5°	2891.4	2886.8	2890.4	2889.5	2886.8	2886.8	2883.1	2883.1
30°	3051.1	3049.2	3054.7	3050.2	3041.0	3040.1	3036.5	3031.9
32.5°	3235.4	3233.6	3241.8	3236.3	3221.7	3213.5	3206.2	3202.6
35°	3440.8	3441.7	3451.7	3448.1	3431.7	3426.2	3413.4	3411.6
37.5°	3665.3	3679.9	3697.2	3700.9	3687.2	3683.6	3669.9	3662.6
40°	3929.1	3948.2	3974.7	3981.1	3966.5	3963.7	3944.6	3934.5
42.5°	4210.2	4243.0	4275.9	4281.4	4266.8	4252.2	4233.9	4226.6
45°	4524.1	4563.4	4606.3	4617.2	4595.3	4578.0	4554.3	4554.3
47.5°	4876.4	4925.7	4974.1	5004.2	4984.1	4965.9	4937.6	4919.3
50°	5292.6	5360.1	5423.1	5454.1	5422.2	5387.5	5338.2	5321.8
52.5°	5814.7	5887.7	5942.4	5926.0	5876.7	5828.3	5774.5	5752.6
55°	6480.9	6505.5	6505.5	6443.5	6344.9	6263.7	6178.8	6150.5
57.5°	7314.2	7219.3	7073.2	6888.0	6655.2	6452.6	6315.7	6250.9
60°	8293.5	7837.1	7321.5	6814.9	6398.8	6055.6	5852.1	5759.0
62.5°	8946.0	7752.3	6719.1	5905.9	5307.2	4893.8	4612.7	4503.1
65°	8361.0	6465.4	5081.8	4108.9	3456.3	3035.6	2757.2	2655.0
67.5°	6124.1	4051.4	2706.1	1939.4	1421.0	1133.5	1019.5	972.0
70°	2749.0	1426.5	874.3	682.7	588.7	540.3	519.3	512.0
72.5°	828.7	599.6	505.6	456.3	418.9	395.2	377.8	376.0
75°	500.1	416.2	369.6	340.4	316.7	297.5	288.4	285.7
77.5°	349.6	305.7	283.8	262.9	244.6	230.0	221.8	215.4
80°	245.5	224.5	214.5	202.6	190.7	177.1	165.2	159.7
82.5°	164.3	159.7	159.7	152.4	142.4	129.6	105.9	100.4
85°	105.9	105.0	106.8	104.0	96.7	83.1	68.5	64.8
87.5°	49.3	50.2	55.7	54.8	52.9	43.8	34.7	32.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)